

Sincerely Yours
Chas. E. Greening



UNVEILING OF THE EQUESTRIAN STATUE IN HONOR OF MAJOR-GENERAL GEORGE ARMSTRONG CUSTER
AT MONROE, MICHIGAN, JUNE 4, 1910



President Taft, Governor Warner, Hon. Otto Kirschner
on Speaker's Platform

Custer Statue at moment of Unveiling, when
Mrs. Custer Pulled the Ribbon

The old bronze miniature Custer Statuette,
for thirty years in custody of the Old Guard
at Washington, D. C., which was presented to
Charles E. Greening

Portrait of Charles E. Greening,
President of Greening Nursery Co.
and Greening Landscape Co.

Hon. Charles E. Greening
Introducing Mrs. Custer to President Taft

St. Mary's Academy, where President Taft was given
a Reception, showing Decorative Planting by the
Greening Landscape Co.

Silver Loving Cup presented to
Charles E. Greening by the City of Monroe
in appreciation of his management of the Custer matter

TRIBUTES OF HONOR ACCORDED HON. CHARLES E. GREENING
IN RECOGNITION OF HIS SERVICES IN SECURING THE ERECTION OF THE CUSTER STATUE

THE AUTHOR'S OWN GARDEN

First a plant is married to the soil—
And a garden world is born.

IN the course of a very active business career I have found great solace in taking care of my garden, ministering to the wants of the trees, shrubs and other plants that compose it, and forgetting my troubles in their tender ministrations to me. A wonderful thing is a garden! It is in very truth the "balm of hurt minds and tired nature's sweet restorer." The man who has become brain-weary in the never-ending grind of gold-getting can find surcease from all his cares and attain a real renewal of youth by working a few minutes a day among his flowers. Every plant speaks a message, from the little Scarlet Runner that comes like a poem of regret from the sad heart of the earth, to the Giant Oak that tells of sturdy strength and mocks at every storm. In such associations a man gathers poise and calm for toils to come and feels a zest for every jest. Those who love a garden die young—no matter how old they live.

So much pleasure has come to me from the care of my gardens, both in the city and at my country home, that I append a few pictures illustrating my hobby, hoping it may inspire others to follow my example and share the joy that has been mine through the cultivation of flowers.



CHARLES E. GREENING AND HIS BEAUTIFUL GARDEN

Laying out grounds, as it is called, may be considered as a liberal art, in some sort like poetry and painting; and its object, like that of all the liberal arts, is, or ought to be, to move the affections under the control of good sense. If this be so when we are merely putting together words or colors, how much more ought the feeling to prevail when we are in the midst of the realities of things; of the beauty and harmony, of the joy and happiness of living creatures; of men and children, of birds and beasts, of hills and streams, and trees and flowers, with the changes of night and day, evening and morning, summer and winter, and all their unwearied actions and energies.—WORDSWORTH.

The publication of this book is the culmination of a lifetime of effort and study, and it is hoped that its presentation in pictorial form will prove valuable to all lovers of beautiful homes.

THE GREENING PICTORIAL SYSTEM OF LANDSCAPE GARDENING

BEING A SYSTEM OF DECORATIVE PLANTING
BASED ON PICTORIAL ART, WHEREBY GROUNDS
ARE MADE BEAUTIFUL BY TASTEFUL COMPOSI-
TIONS OF TREES, SHRUBS, VINES AND FLOWERS
ARTISTICALLY ARRANGED. IT IS DESIGNED FOR
THE EASY COMPREHENSION OF AMATEUR GAR-
DENERS AND AS A REFERENCE BOOK FOR LAND-
SCAPE ARCHITECTS, THE OBJECT OF THE AUTHOR
BEING TO EDUCATE THOSE WHO ARE EARNESTLY
INTERESTED IN THE BEAUTIFICATION OF OUR
CITIES AND HOMES. THE ILLUSTRATIONS CON-
TAINED ARE TRUE PHOTOGRAPHS WHICH, WITH
THE DESCRIPTIVE READING MATTER ATTACHED,
PORTRAY THE BEST EXAMPLES OF ART GARDEN-
ING, EASILY UNDERSTOOD EVEN BY THOSE WHO
ARE INEXPERIENCED IN LANDSCAPE DESIGNING



BY

CHARLES E. GREENING
DIRECTOR OF THE GREENING LANDSCAPE COMPANY
MONROE, MICHIGAN

SE-471
G7

ENTERED ACCORDING TO ACT OF CONGRESS IN THE YEAR NINETEEN HUNDRED AND TEN
BY CHARLES E. GREENING
IN THE OFFICE OF THE LIBRARIAN OF CONGRESS AT WASHINGTON, D. C.

ALL RIGHTS RESERVED
INCLUDING THAT OF TRANSLATION INTO FOREIGN LANGUAGES
NOT EXCEPTING THE SCANDINAVIAN

COYPRIGHT PROTECTION INCLUDES
TITLE, TEXT, ILLUSTRATIONS AND SYSTEM

PRICE
HALF MOROCCO, \$5.00

TOLEDO, OHIO:
THE BLADE PRINTING & PAPER CO.
MCMX.

SALUTATION



HIS is a story told in pictures. Many authors have written voluminously on the subject of landscape gardening, and their works have benefited the professional few; but in these days of the "strenuous life" most people have neither the time nor the mood to pursue abstruse studies.

Pictures speak a universal language, and they speak it with the directness of light and the speed of sight. One glance at a picture will convey more information than many pages of text. This fact has resolved the author, for the sake of brevity and accuracy, to tell his thought with many pictures rather than with much writing.

The book is arranged somewhat like an art gallery, the pictures being grouped in an orderly manner for individual study, and the descriptions attached are designed so as to help the reader analyze each subject and to arrive at a fair appreciation of its artistic merits; so that if a man will imagine himself sitting in a Museum of Art on a Sunday afternoon listening to an illustrated lecture by the Director, he will be in a state of mind to receive the most profit and acquire the most knowledge in the art of landscape gardening. And of course when I speak of man I also include woman, for, as Susan B. Anthony used to say, "Man embraces woman."

The perception of the basic principles of landscape gardening first came to me several years ago whilst loitering in a picture-gallery. A Corot was on exhibition. And as I looked on that poetic landscape—the dreamland of Fairyland; that peaceful cottage, where neither sigh nor sob of sorrow ever broke; those sad poplars that told and told again the grief of glories gone before—the kiss that pathos gives to joy; the many-armed vines that crept and twined with root and tendril to the roof—a prophecy fulfilled—there stole into my soul the delicious sense of perception, the electric thrill of discovery. I had found the secret. And from the dawning of that light the laying-out of grounds has been my greatest pleasure and my chiefest joy.

And in after-years when it became my great good fortune to visit Europe, this beautiful inspiration was supplemented by a



A SUBURBAN HOME

careful study of the classic gardens of England and the Continent; and this book, containing the fruit of all my studies and observations on the subject of civic and home beautification, is my contribution to the cause of outdoor art in America.

In writing the descriptions of the pictures no effort has been spared to make my meaning clear, the frequent digressions from my theme being designed to throw an incidental side-light on points that otherwise were moot; and to add to the reader's interest and amusement I have at times indulged a rhythmic flight of poetic fancy or made a few philosophical reflections, whilst on occasions not a few I have ventured with cautious steps to the borderland of mirth.

The pictures are grouped topically as much as possible and, as the book is designed for the amateur gardener as well as for the experienced landscape architect, I have used both the popular and technical nomenclatures, co-ordinately or singly, always cautious to guard against ambiguity or useless repetition.

The complete catalogue of trees, shrubs, vines, roses and other plants which is appended to this volume will be a great help to designers in making detail planting lists, and the amateur will find it indispensable.

THE AUTHOR.



A graceful curve in the hedge

TWO VIEWS OF THE GROUNDS OF
ST. MARY'S ACADEMY
MONROE, MICHIGAN
SHOWING ONE YEAR'S GROWTH OF
TREES AND SHRUBS PLANTED BY THE
GREENING LANDSCAPE COMPANY

The Greening Landscape Company, Monroe, Mich.

We wish to take this opportunity to express our entire satisfaction in the work done on the grounds surrounding our new college buildings. Your selection and artistic arrangement of trees and shrubbery have greatly improved the appearance of our lawns, and have met with favorable comment from the many callers at St. Mary's during the past several months. Assuring you of our appreciation and gratitude, we are, dear sir,

St. Mary's Academy, Monroe, Mich.



Effective border, massed planting of hardy shrubs. Silver Maples pruned under the Greening system

Our System

The Trinity of Landscape Service



THREE factors enter into the making of a landscape—the designer, the nurseryman, and the gardener; and this trinity must work in harmony to produce satisfactory results. Manifestly the most harmony is secured when all three factors are combined in one service, for, as St. Patrick used to explain with the clover-leaf, “the three are one.”

Gardening is done upon honor. The work is technical, and the owner must place his trust in those that he employs. By getting one man to make the plans, another to execute them, and still another to furnish the trees and plants, the risk of betrayal, to say nothing of making mistakes and of inharmonious co-operation, is enormously increased.

DISADVANTAGES OF THE OLD WAY

The old way, which is still in vogue among landscape gardeners of the old school, was absolutely without method or

system, and the owner floundered about in a sea of uncertainty. First, he consulted a landscape architect, who prepared a set of planting plans more or less practical, depending on the experience of the designer, and for which the owner was required to pay a good sum of money as a professional fee. Sometimes the service was worth the price and sometimes it was not, for frequently the designer was a visionary dreamer, who had wheels in his head but who lacked the balance-wheel of the grower's experience, and the most outlandish and incongruous features were introduced. Next, the owner sought out a nurseryman to furnish the trees and plants required; but as he had no personal knowledge of the soil, aspect or other conditions he was unable to offer advice, and his information on the subject of hardiness and adaptability of varieties was lost to the owner. Lastly, a gardener was found to do the planting, but as he had no professional pride in the outcome and often no sympathy with the plan, the work was done in an indifferent way with disappointing results. *Each shifted the blame upon the others, and as none was*



Plate 1

The clover leaf graphically illustrates the triple quality of our service, each branch of the work being complementary to the others. Our artists develop an artistic design, our propagators and nurserymen grow a hardy and thrifty line of trees and shrubs, and our gardeners execute the plans in the most workmanlike manner. *The three are one.*

responsible for the mistakes of the others, and often not for his own, the owner was absolutely without recourse except to begin all over again.

And during the progress of the work, if any changes were desired or mistakes were discovered, the same old routine turned up, and the owner hied himself to the designer and from the designer to the grower and from the grower to the gardener, over and over again, in a pussy-wants-a-corner sort of a way, until in sheer desperation the garden was abandoned or aborted in a half-completed stage.

Under such circumstances is it any wonder that we have so few beautiful gardens in America?

ADVANTAGES**OF THE NEW WAY**

The Greening System does away with all this uncertainty by combining all three classes of service in one contract and responsibility; so that the whole work is done under one management, and relieves the owner of all worry regarding the practical results of his garden. A great burden is lifted from his mind, for it stands to reason that a big company with professional standing to maintain and a large capital involved will not jeopardize either by careless treatment of a client or mismanagement of his work. Moreover, the size of our business has attracted and will continue to attract the most artistic and skillful designers, engineers, propagators and gardeners in the world, for we can afford to pay them well for their services, and they find with us an opportunity to exercise their highest faculties, which is after all the greatest activating force.

CREATIVE GENIUS LONGS FOR THE JOY OF EXPRESSION. At the present time we have with us English, German, French, Italian and Japanese gardeners, each imbued with the artistic ideals of his own land; so that our Department of Design is justly regarded as the clearing-house of the best landscape ideas in the world. Our gardeners have the immense advantage of consultation among themselves when difficult problems are presented, and the whole nursery serves as an arboretum for study; whilst our studios, including draughting and blue-printing rooms, are equipped with a complete reference library and every known engineering device and instrument.

LANDSCAPE**DESIGNERS**

To summarize, let us repeat that we are landscape designers, and our designs are not only practical but they combine the highest artistic conceptions in this class of work. All uncertainty is eliminated, and our service saves you money.

LANDSCAPE**NURSERYMEN**

We grow a special line of ornamentals for a select landscape trade, and our stock comprises many rare, tested novelties, not found in a general nursery; besides, we know the requirements of this class of work. Our clients will never receive small, puny, mail-size specimens of shrubs such as are sent out by some nurseries, and which usually die after a few weeks in the garden; nor will they receive old, overgrown, decrepit specimens that are almost ready for the brush-pile, such as are often sent out under the specious pretense,



Plate 2

A SUNKEN GARDEN

Sunken gardens are very effective, especially as adjuncts to a Colonial mansion. The above subject is in good taste. Near the porch and portico are stately Bay-Trees. Boston Ives are growing at the base of the building and will soon reach the cornice. A stone balustrade separates the garden from the court and makes the planting a distinct entity. The beds are filled with free-blooming perennials that give a riot of color all summer. In the foreground are Oriental Poppies. Next are Shasta Daisy, Foxglove, Lilium, New England Aster, Helianthus, Boltonia, Ornamental Grass and Yucca Filamentosa. The walks are of brick, laid on gravel. In the background is a grove of trees, mostly Maples.

of producing immediate effects. Future effects are far more important than present effects, for the future will last much longer. The present is nearly gone, anyhow. It is an awful thing to have a garden with its future all in the past! There is no odor in the flowers of the vanished years.

Our nurseries are located in a northern latitude, where the stock is acclimated to the most severe conditions, so that it cannot fail to do well when transplanted to your grounds. We dig with steam-power, and get practically all the roots. We have the largest tree-cellars in the world, and all packing operations are carried on under roof. And all this unique nursery service, with its splendid organization for growing and distributing the highest grade of ornamental trees and shrubs, saves you money.

LANDSCAPE GARDENERS

Our force of gardeners is thoroughly practical in every detail of their work, from preparing the ground, or renovating it when necessary, to the last touches of pruning when the planting is done. And the work is accomplished with such nicety of finish that the effect is pleasing from the start. Hundreds of clients testify to the efficiency of our system; and this excellent garden service saves you money.

It saves you money.

MUNICIPAL AND CORPORATION WORK

Our system will appeal with especial force to Park Boards, Cemetery Boards and others having charge of large grounds with public responsibilities. Public service is a thankless task at best. That is where "the mistakes that men make live after them, but the good is oft interred with their bones." A man can overcome his own mistakes, but the public never forgets nor forgives the mistakes made in its service. It therefore behooves Park and Cemetery Commissioners to place their landscape business with a reliable and responsible concern like ours; and please keep in mind that our service saves you money.

It saves you money.

OUR PRICES

Our prices are based on a fixed standard, depending on the amount of preliminary work required to make the plans, and also on the expense of preparing the ground; so that the property can be developed in one complete job, or in sections as the appropriation of funds will allow. But in every case we will give the lowest possible prices, quality of work and goods considered, and we guarantee that our service saves you money.

It saves you money.



Plate 3

AN ARBORGOLA

The reader has never heard of an arborgola before; neither have I. But I coin the word as appropriately descriptive of this structure, which is a sort of cross between an arbor and a pergola. It is built like a pergola, but instead of being over the walk it is on one side and gives the service of an arbor. The arch in the distance leads to the formal garden.

charity! In family life we have father, mother, child. In old English law we learn of the three estates, the same being interpreted in American civics as the three branches of government. In mythology we find the three graces and the three furies. The office-boy wants me to add that a triangle has three sides, a stool has three legs, a fork has three prongs, and a crowd gives three cheers! And by way of a clincher he says a baseball team has three times three men and three strikes are out—all of which is probably true. He knows.



Strange are the properties of the number three! When I crossed the ocean, the captain of our ship informed me that in a storm the waves form themselves in groups of three—three heavy swells and then a choppy sea, three more heavy swells and then a semi-lull, and so on. In logic a syllogism has three parts. In Christian theology there are three divine persons and three cardinal virtues—faith, hope and charity—and the greatest of these is

BASIC PRINCIPLES OF LANDSCAPE GARDENING

THE art of landscape gardening is based on certain principles that are easy of application, and they are applicable to all grounds, large or small. It should be understood at the outset that it is just as easy and just as difficult to lay out small grounds as large, for the same principles are involved in both; with this exception, that on small grounds the lines should be drawn with more care and with more intensity of expression. The little cottage garden can be made just as charming in its way as the spacious grounds of a lordly estate. Good taste in gardening is not essentially different from good taste in music, sculpture, architecture, or any other form of art; it is an appeal to the æsthetic nature and cultural refinement of man.

Strictly speaking, there are but two kinds of garden compositions — the natural and the formal.

NATURAL GARDENS

Natural gardens, as the name implies, are designed in imitation of nature and, of course, consist in preserving all existing natural forms that are agreeable; so that by combining and rearranging them, and associating with them colonies of trees and shrubs, certain artistic effects are produced that satisfy our taste for beauty. When the ground is level or nearly so, and the treatment is pastoral in tone, such a garden is sometimes called a pictorial garden, and is most admired by people who possess a dreamy and poetic temperament; when the scenery is broken and diversified, with rocks and rivulets and pools as major features, it becomes a picturesque garden, and is the especial favorite of the Rooseveltian type of man — the devotee of the strenuous life. What is called a water garden is simply another aspect of the natural garden. In short, the natural garden is the kind that the Lord built during creation week and saw that it was good.

FORMAL GARDENS

The formal garden is also good in its way and place, but it is altogether different in style and arrangement. It is built along straight lines and, to a great extent, depends for its charm upon the precision of its geometric forms. What are known as Italian gardens, sunken gardens and old-fashioned gardens are but modified types of the



Plate 4

A PICTURESQUE SCENE

The high terrace and pronounced declivity of the lawn is a bold effect which is pretty in itself, and the treatment has increased the charm. Sturdy, rugged subjects, like Oaks and Evergreens, were used, and the whole scene is suggestive of martial music. It is not a restful scene, and yet there is something in it that fascinates, just as we find a charm in the stirring strains of the Marseillaise. A good illustration of unity of composition and of well-conceived design.

formal garden. When many architectural embellishments are introduced such as balustrades, sun-dials, fountains, etc., it partakes of the nature of an Italian garden. A sunken garden is on a depressed grade, with terraced banks, and usually contains many carpet-bed ornamentations of fanciful figures. The old-fashioned garden brings together in an orderly way all the old-time garden favorites, and they are bedded in a well-proportioned setting of lawn. But in the last analysis all the above are merely types of the formal garden, and they are most agreeable to people with an orderly cast of mind. Those who are measured and mathematical in their mental processes find much pleasure in the contemplation of formal gardens.

And there are people with such well-balanced mental organizations that they like all kinds of gardens, just as others with cultivated literary tastes find equal pleasure in the romances of Sir Walter Scott, the war lyrics of Campbell and the love sonnets of Shakespeare.

STUDY OF A**NATURAL GARDEN**

Having thus made plain the distinction between natural and formal gardens, I shall now enumerate and illustrate the principles employed in the formation of each.

Let us consider first the natural garden, and by the study of a concrete example we shall learn the principles involved and their correct application. Plate 5 represents a city yard of medium size, say 135 by 170 feet. It is altogether unimproved except for the erection of the house and garage. There it stands, a wide, open maw of ground: what shall we do with it?

WALKS**AND DRIVES**

The first thing requiring our attention is to build convenient approaches, that is to say, a system of walks and drives sufficient for the needs of the family, and their location will depend somewhat on the size and shape of the place. They should be direct—not straight necessarily, for curves are rhythmic in effect and pleasing to the eye; but curves should not have a forced or unnatural appearance—they should be tempered with that “sweet reasonableness” that adds to beauty without detracting from convenience. In the present instance the short walks are straight; for it is seldom practicable to introduce curves in walks less than 40 feet long, unless there is a natural interference such as a tree or abrupt grade to force the line of travel in another direction. It is a clever little artistic trick of gardeners to build such an interference in the absence of a natural one and thus introduce curves that otherwise would be meaningless. There is an illustration of this in plate 40, where a rockery was built to justify a curve, and it is done with such consummate art that we are taken unawares, and the illusion is so perfect that we forget to question whether it is natural or not.

If the driveway were built on the south side of the house it also would clearly have to be straight, and it would answer the demands of convenience; but artistic reasons determine its location on the north side. From both entrances the house is approached at an angle that shows two elevations at once, and thus displays to advantage whatever beauty the house itself possesses. Architects like to view their houses that way. Then, the line of travel being longer, an easy sweep is perfectly natural. The effect of a slight curve is magical. The observer sees the garden at a constantly changing angle, and new light and shadow effects come

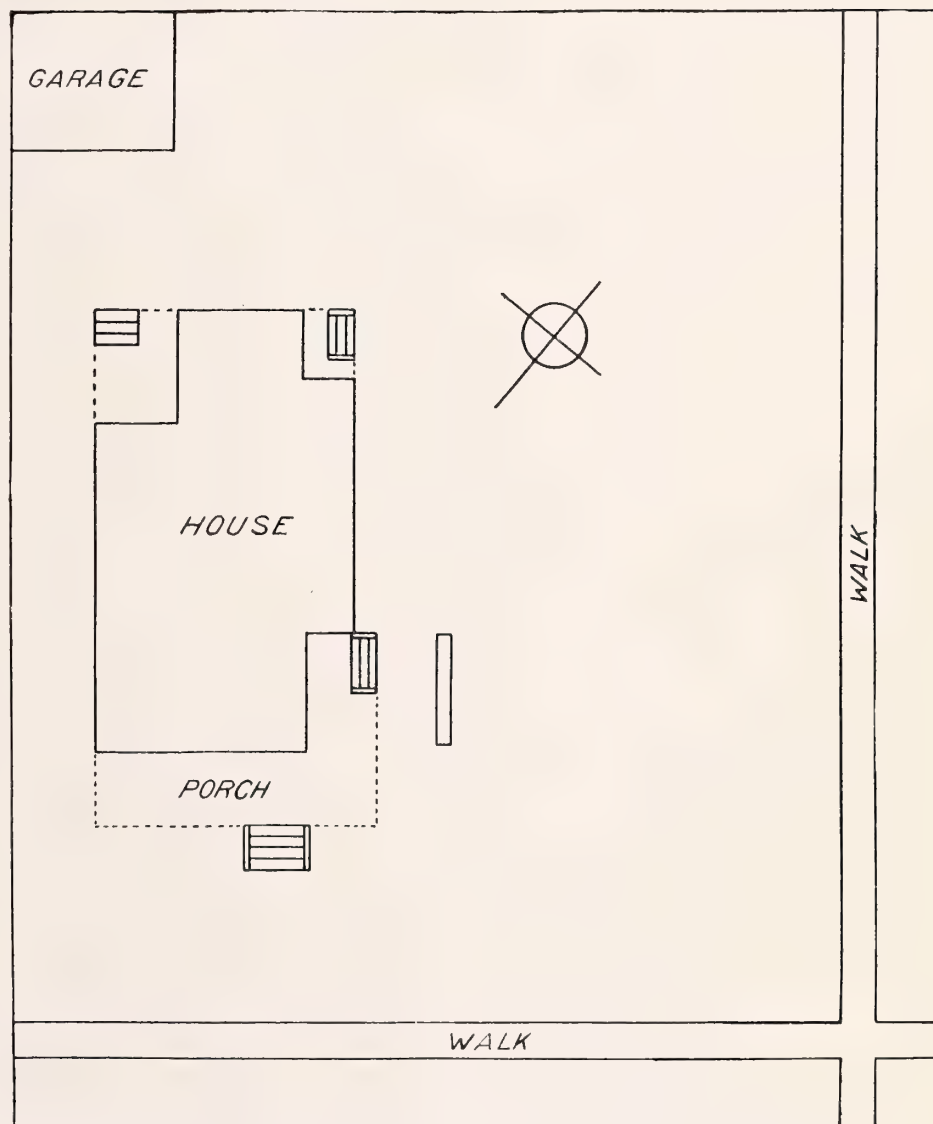


Plate 5

into play like an animated panorama. We have now laid out our walks and drives and plate 6 shows the result of our work.

The next step is to plant trees and shrubs in an artistic way, and plate 7 shows the application of correct principles. It will help us to an understanding of these principles if we consider the lawn as a canvas and proceed to make a picture in precisely the same way that an artist does in painting a landscape; with this difference, that he works with colored pigments, and we work with trees and plants, each one a living organism pulsating with the subtle influences of the earth and air.

ACCENTUATION

There is one word that describes all artistic compositions. Accentuation is that word. The artist selects the points of emphasis, and every touch of the brush, from the dog upon the sward to the bird upon the wing, is designed to accentuate those points. Following his example let us proceed in developing our picture by planting trees and shrubs to accentuate the beauties of the house, which is always the main feature and, in small grounds, the only feature to emphasize.

With all due respect and admiration for the genius of architects and the beauty of their designs, I believe it is not in their power to build a house that possesses a perfectly natural pose. The most that can be said is that it is a beautiful artificial creation. No artist would think for a moment of putting a house unadorned upon his canvas. He drapes vines upon the porch and covers some wide expanse of wall with other vines. He masses large groups of shrubs near the foundation, especially at the entrances, so as to naturalize the house and make us feel that it necessarily grew just where and how it is.

Next he provides large open lawn-spaces adjoining the house to give the contrasting high lights and for the sense of freedom and repose they give, and this area is absolutely unencumbered save for a few shade-trees placed with due regard to the lines of vision, to the end that deep, beautiful vistas may open from the windows of the living-room. Realizing that gardens are for use he sets aside certain portions of the yard for certain uses, just as each room in a house has its purpose. There are reservations for the rose garden, the cut-flower garden, the vegetable garden, etc., each in an appropriate place; and finally, knowing that the grounds lack character without some definiteness of outline, a heavy framework of shrubs is put around the premises, especially at the back and sides, with particular care to have the heavier growth at the rear, and all plants set out in large native colonies. Imitating nature he avoids straight lines as much as possible and plants in undulated borders, using at the edges low shrubs of a prostrate habit to serve as a ground cover and to make an easy, natural union with the lawn. Unsightly views are completely shut off with appropriate plantings, and distant glimpses of water and fleecy sky-line are deftly appropriated to the garden's beauties. Keeping in mind the needs of the family and the present tendency to regard a garden as an "outdoor parlor," or an extension of the home comforts, the border planting is tall enough to serve as a screen and

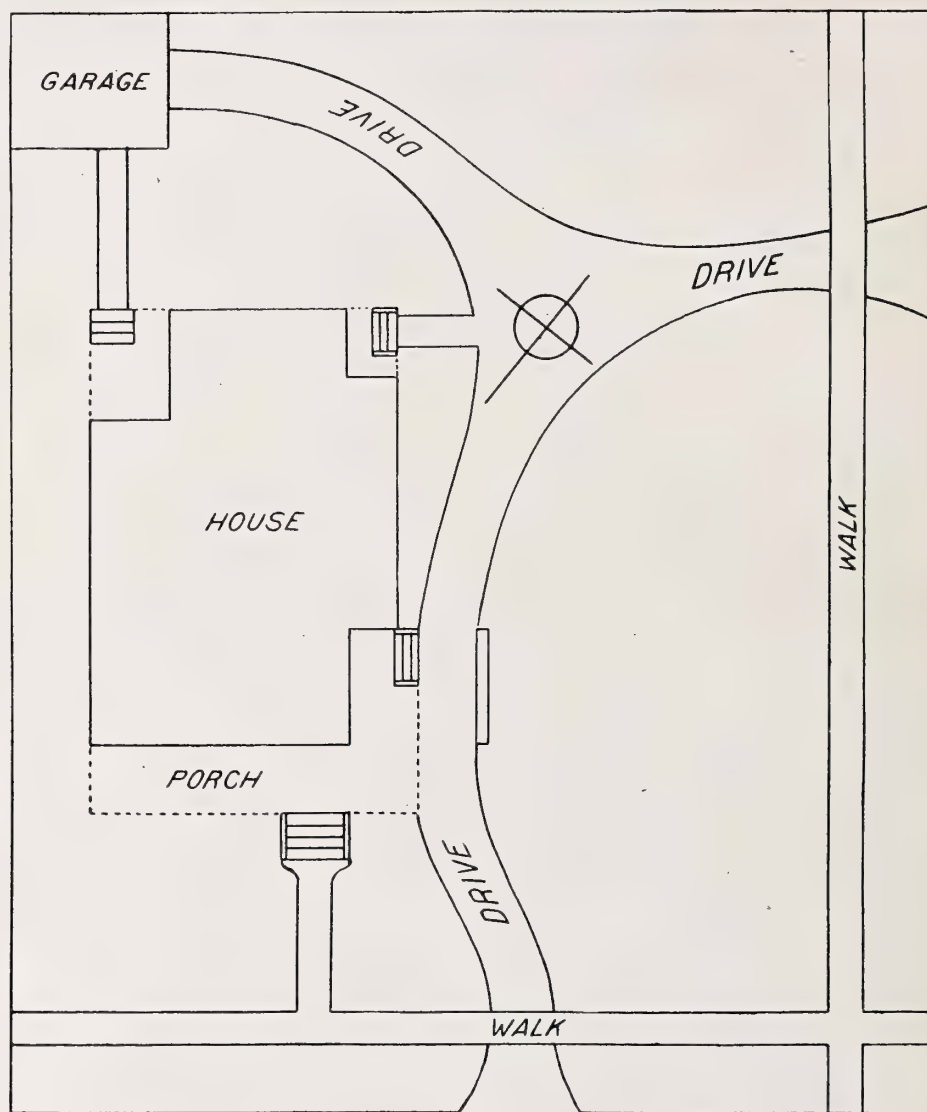


Plate 6

give privacy to the owner and his family; and in particular a little bower is provided where the ladies of the household may find a cool retreat for enjoyment, with perfect freedom from unwelcome intrusion. A shelter-house is built in this little retreat to soften the ardor of the summer sun, and in which tea may be served after the manner of the Japanese; and to enliven the scenery a water garden, stocked with fishes and water-loving plants, is placed near the entrance. This also adds greatly to the privacy of the garden bower.

Immediately back of the house and screened with shrubs is the drying-yard or clothes-paddock; back of that is a reservation

for growing small table vegetables, like lettuce, radishes, onions, and sweet herbs; and separating this from the rose and cut-flower garden is the sweet-pea trellis.

THE FORMAL GARDEN We now come to the formal garden, which consists of seven beds. The one near the driveway is filled with tall perennials.

This separates the roses and other cut-flowers from the rest of the yard, and makes the formal part a separate garden unit. On examination it is found to be a parallelogram 26 by 52 feet, divided by a system of grass walks into six well-proportioned flower-beds, the two center beds forming a true circle. The four corner beds are rectangular with the exception of the sides next to the circle, which follow the same curve. The two center beds are filled with tall-growing Hybrid Perpetual Roses and Gladiolus bulbs interspersed between to add color during the midsummer season, and the four corner beds contain low bedding-roses that bloom all summer, like the Hybrid Teas, Hybrid Noisettes, and Dwarf Polyanthas, the best varieties of the latter being the Baby Ramblers. This is the only formal effect on the entire premises, and is pleasing from the fact that it possesses much beauty of its own and offers a change of scenery from the natural effects which predominate all over the yard.

HEDGES Of late years it has become a custom to do away with the iron fences that were so common a generation ago and either

leave the front of the yard open altogether or enclose it with a clipped hedge as is the common practice in England. In the present instance a hedge is in good taste because the property is not large and all of it is needed for the use of the family. Besides, the house being constructed on straight lines, a formal straight hedge is in perfect harmony with it.

PLANT TREES We will now plant some trees on the street along the sidewalk. They will add variety to the sky-line and also add much to the comfort of pedestrians. On

ordinary streets with a narrow parkway, as in the present instance, it is evident they must be planted in straight lines, and it is also best that they be uniform in kind and size. On very wide avenues with parklike effects trees may be planted irregularly and in colonies.

We have completed the building of a landscape and applied all the basic principles. The transformation from the new yard



Plate 7

to the completed picture has been easy and natural. The change has taken place before our eyes, and we end up with a garden that will be a source of mental and spiritual profit to its owner to the end of his terrestrial days.

We want to be your horticultural adviser in the same sense that you have a legal adviser, a medical adviser and, perhaps, a spiritual adviser. If the little god within you is alive and awake you need us far more than you do a spiritual adviser. Read the gospel of the garden and the frightful word that rhymes with "spell" will never send its shuddering thrill to the nerve centers of your heart.

The Greening Pictorial System of Landscape Gardening

AND this is a distinguishing feature of the Greening System, viz., that it keeps the pictorial side constantly in mind. It aims to make a picture of a house and grounds. The question ever uppermost is, what is the artistic point of view? How would an artist paint that scene? How distribute his high lights and shadows? What is the best color-scheme? And after determining these things we proceed to accomplish them with the proper selection of trees and plants harmoniously arranged. For, after all, the ornamenting of home grounds is like painting a picture. The object is the same. The same end is sought, the same means are used. By color, form, relation and proportion the eye is won and all the senses join in glad content. The imagination is quickened, the sympathies enlarged, and what was once a dream becomes at last a fact.

And following this idea the ornamenting of home grounds becomes a beautiful art. Let the house be the central idea and subordinate every other feature to it. Place no tree or bush in such impudent prominence that it is observed as an entity. Let its beauty be lost in the glory of the whole. Mass your planting in a strong framework to give structural character to the grounds. Put a vine upon the porch and tie the building to the earth with the cunning things that freely grow. Leave a warm, open sward in front—inviting as the lap of love—and you have a landscape more sweetly beautiful than ever issued from Corot's magic brush.

Art exists by expression and for the sake of expression. It is its own excuse for being. It expresses states and shades of feeling and states and shades of thought. There are emotions so deep, so tender and so subtle that no golden tapestry of words can picture them to the sense. It is the office of art to give to every nerve a tongue and let it babble forth its joy.

The fact that a garden should be considered as a consolidated whole, dependent for its beauty upon the perfection of its form, suggests the necessity of determining its ideal size. The object is to have such a com-



Plate 8

A MIDSUMMER SCENE

This is a midsummer scene on a small property that contains a wealth of floral beauty and retains enough lawn for repose. The front is a stone retaining wall that comes to the very edge of the sidewalk, but by draping it with vines it becomes an object of beauty. This vine is *Ampelopsis Veitchii*, and another vine of the same family, *Ampelopsis Quinquefolia*, is used on all five columns of the porch. Note that the shrubs at its base are all hardy *Hydrangea Paniculata*, and that only one distinct specimen tree is used, a *Koster Blue Spruce*, the most attractive conifer ever introduced. This simple treatment is very restful in tone. Note also that the adjoining property is treated in the same way.

position of parts that their visual relation to the whole is impressed upon the observer from some advantageous viewpoint. On small properties the garden may safely include all the available ground; but on large estates it should be five or six acres in extent. Lord Bacon, in his essay "Of Garden," recommends thirty acres, but this is obviously too large for the nervous temperament, especially the American temperament, of the twentieth century. Our gardens, like our poems, should be short and alive with emotion. Such a discussion is, to a large extent, of academic interest and must, in actual practice, be determined by the exigencies of each case; and yet there can be no question as to the general superiority of an area limited to the conveyance of one sustained impression. The perfection of a garden lies in its power to create an unbroken continuity of pleasurable emotions.

LAWNS and LAWN-MAKING

AS the lawn is the foundation of all garden improvements, it should receive particular attention at the outset; for a good sward that is pleasing to the eye and pleasant to the foot adds greatly to the enjoyment of a landscape. Green is the most restful and soothing color there is, and for this reason the art of lawn-making is very important. Anybody can grow grass, but to make a turf is another thing.

PREPARING

THE GROUND

A lawn consists of five parts—three parts preparation, one part seed, and one part care. Without thorough preparation neither good seed nor good care will amount to much. The ground should be at least mellow enough and rich enough to grow a crop of corn, or if anything, better; for you can cultivate the corn after seeding, but cannot cultivate the lawn. After all, the air is the great resolvent and, by chemical action, makes available the plant food that is in the soil. The main object of spading or plowing is to bring to the surface new soil particles to be acted upon by the air so that the plant food is made digestible, so to speak, to the various forms of vegetation; and in the case of lawns this tillage must be done in advance of the seeding and thoroughly enough to last a great many years. It is good practice to spade 8 or 10 inches deep, turning under at the same time a good top-dressing of well-rotted manure.

SEEDING

THE LAWN

Kentucky Blue Grass is our main dependence for lawns, and it makes a beautiful and durable greensward. It is slow in developing, however, and in most situations it is better to use a mixture, including some grasses of quick and precocious growth as fillers, until the Blue Grass is strong enough to occupy all the ground; for sooner or later, usually in about three years, it will make elbow-room for itself by crowding out all the others.

All lawn seeds, with the exception of White Clover, are very light and it is not possible to distribute them evenly on a windy day. Usually towards evening the air is still, and seeding may be done at that time; otherwise it is better to wait for a quiet day. Broadcasting by hand is best, letting the seed filter through the fingers, and the writer's practice is to go over the ground twice,



Plate 9

A PARK SCENE

This is a park scene. The bow-bridge in the background spans a valley which, at that particular point, is narrowed to the throat of a ravine. The stately tree in the foreground is a Linden, which stands like an oasis of comfort in the middle of the valley. The grove in the background lining the driveway is composed of Lindens also, and reminds the writer of the famous avenues of Germany. An automobile journey *Unter den Linden*, in Berlin, is one of the happy experiences of his life.

the second seeding at right angles to the first, as this secures a much more even distribution. In the case of White Clover I mix with five parts of sand, when it can be used by the handful and kept in good control. After seeding, a light raking is necessary to cover the seed, and then roll to firm the soil.

As a matter of personal preference I wish to say here, parenthetically, that I do not like White Clover in a lawn and do not recommend it; for the white blossoms blotch the green so badly that much of its beauty is lost. I am well aware, however, that this is merely a matter of choice, and that many people of discriminating tastes like White Clover, and it is in justice to them that I give directions for sowing it. One thing to be said in its favor is that it makes a lawn that is easily managed. It will not run away from you. If you can't mow it this week, next week will do!

COUNTRY LAWNS

Lawns in the country, where there is no water service, should not be cut too short during the summer months. The turf gets a good deal of protection from the shade of the grass, and close mowing deprives it of this protection. Three inches will be found manageable and neat-looking and, at the same time, long enough to shade the roots appreciably. The best lawn mixture to use for such places contains 75% Rhode Island Bent and 25% Kentucky Blue Grass. The Bent has a very deep green color, which it retains during the hot period, and it accommodates itself fairly well to dry locations. It is the basis of the best Newport lawns.

CARE OF THE LAWN

Do not cut too frequently during the first year, say every ten days, and keep the mower sharp to reduce the pulling as much as possible. It will also ease the pushing and save your back from fatigue, unless you do the work by proxy, in which case it will save somebody else's back, which is the same thing. Frequent rolling will also be a great help by firming the ground on the roots and thus prevent drying out.

WATERING

Even with thorough preparation of the soil watering will be required during periods of prolonged drought, but speaking in a general way the ordinary sprinkling as commonly practiced does more harm than good. It does lessen the transpiration of the leaves, and it does temporarily replace the loss by evaporation from the surface of the ground, and lastly it does act as a whip or spur to goad the grass to a better growth during the trying season; but all these are merely incidental benefits and do not inure to the permanent betterment of the lawn. The trouble is that sprinkling does not reach the root field where water is needed, and instead of creeping downward for moisture the roots will crawl up near the surface, where they will be exposed to much winter injury by frost and where, too, the plant food is more nearly exhausted.

Most grass plants will normally root about four inches deep, and that is where the water is needed. It is evident that the ordinary sprinkling does not soak the ground more than an inch or two. When watering is done it should be done so thoroughly as to soak the ground for at least six inches, and then there should be an interval of a few days without watering to give a breathing-



Plate 10

SIDE ENTRANCE TO A MANSION

This is the side entrance to a mansion—virtually a back yard. It is a Decoration Day scene, for the *Spiræa Van Houttei* is in full bloom. The solid mass of one kind of shrubs looks like nature's own setting—it is nature's way to grow plants in colonies—and the effect is so softening that the severe architecture is forgotten. The detached subject that looks like one shrub is really composed of three shrubs planted three feet apart triangularly and developed to one large mass of foliage. The tall trees in the background serve as a shady bower and, at the same time, give privacy to the two yards which they separate. Observe that they are grown in their natural pose and have not been headed up. The three plants at the turn of the walk and the one beyond are *Yucca Filamentosa*. The vines on the house at the rear are *Ampelopsis Veitchii*, otherwise known as Boston Ivy.

spell, so the air may enter the ground and keep it sweet and in good heart.

MULCHING AND
FERTILIZING

This can be done at one operation by using a dressing of well-rotted manure in the fall, which is the best kind of winter protection. In the spring the coarser fiber is raked away and the finer particles percolate among the grass roots to add fertility to the soil and, at the same time, improve its mechanical condition by making it more porous and retentive of water. It is important, however, that the manure be well-rotted, to guard against the introduction of weed seeds.

It is good practice to sow a lawn very thick—eighty pounds to the acre is about right. This will occupy the ground quite fully the first year and thus exclude the weeds. It is also well to go over the lawn twice a year—in April and September—and sow a sprinkling of seed in places where it appears too thin

SEED MIXTURES FOR DIFFERENT SOILS

For Shaded Places

Kentucky Blue Grass.....	35 per cent.
Wood Meadow Grass.....	45 “
Crested Dog's-Tail.....	20 “

For Terraces

Rhode Island Bent.....	50 per cent.
Crested Dog's-Tail.....	30 “
Kentucky Blue Grass.....	20 “

For Putting-Greens

Rhode Island Bent.....	40 per cent.
Creeping Bent.....	30 “
Crested Dog's-Tail.....	30 “

For Clay Soils

Kentucky Blue Grass.....	60 per cent.
Red Top.....	40 “

For Sandy Soils

Kentucky Blue Grass.....	30 per cent.
Rhode Island Bent.....	40 “
Creeping Bent.....	30 “

For Country Lawns

Kentucky Blue Grass.....	25 per cent.
Rhode Island Bent.....	75 “

ANTS IN LAWNS

ON sandy soils, ants sometimes become a very troublesome pest. They do not directly attack the plants but they do much mischief by the way they loosen up the soil in making their tunnels and galleries, thus disturbing the grass roots and causing them to dry out. The best means to destroy them is by the use of carbon bisulphide, which is a heavy volatile liquid. The fumes, being heavier than air, quickly penetrate downward, dealing instant death to the entire colony. First, make a hole with a stick; in it pour two tablespoonfuls of the poison, cover the hill with a wet cloth to confine the gas, and it is all over with the ants—the black ants that live in hills.



Plate 11

OPEN LAWN TREATMENT

This is one of the most costly mansions in Michigan, occupying just one-quarter of a city block, which is not much ground for a property of this kind. The expedient was used of planting a massive hedge of Norway Spruce on the parkway, as can be seen in the right offscap, virtually adding 40 feet to the yard. With this treatment there is enough open lawn to look well. The specimen tree is a Koster's Colorado Blue Spruce. The vines on the house are Ampelopsis Veitchii and the shrubs by the porch are Spiræa Van Houttei. The trees on the street are Elm.

CAUTION: Carbon bisulphide is a very active poison and its use should not be entrusted to children. It is also very inflammable and its vapor is highly explosive. *Do not use near a fire.*

When a lawn becomes infested with the small red ants that make little ring-like mounds, about the size of a coat-button, all over the yard, the best treatment is a dressing of tobacco dust, or wood ashes, or kainit, repeated until the pest is abated. All these are good fertilizers.

Another good way to fight the little red ant is to make a solution of cyanide of potash and, after applying evenly with a sprinkling can, wash it down with a hose. This is also a very active poison and must be used with great care.

HARDY TREES and SHRUBS

SPEAKING from the standpoint of the North Central and Middle West States, hardiness means the ability to withstand very low temperatures; for it cannot be denied that we have a very capricious climate, with an extreme range of 150 degrees, in the belt of country between the latitudes of, say Cincinnati and St. Paul. This exceeds the climatic variation of any other part of the world. There are hundreds of shrubs grown in England and Continental Europe that would succumb to the first winter's exposure in the region in question. There are scores of shrubs that do well in the moist atmosphere of the American Atlantic coast that would suffocate the first summer in the dry air of inland locations. This accounts for the failures of gardens patterned after European models or after designs furnished by Eastern gardeners.

I was brought up in the nursery business and, to use the phrase of the Quakers, I am a birthright horticulturist. My earliest life-lesson was in the art of plant-propagation, and following a natural inclination I have been associated with trees and plants all my life, much of the time as president and principal owner of one of the largest nursery properties in the world. During all these years of active work in growing and transplanting trees and shrubs, every known variety has come under my observation. Year by year I have followed a system of elimination, discarding those that did not stand the test of hardiness and endurance; so that the varieties recommended in this book are absolutely dependable.

And after all I do not see how this knowledge can be gained in any other way. By actual, living contact with trees and plants a gardener acquires what the medical profession calls "tactus eruditus," or the learned touch, and he can give an artistic finish to his work which is impossible to a man possessing merely academic training. A university education is a good thing for a young man who has a natural aptitude for this kind of work; but it cannot be said too often that education, in and of itself, does not give capacity. The mere ability to draw beautiful pictures from imagination does not make a landscape gardener, any more than the ability to articulate English speech makes a man an orator like Webster or Edward Everett.

Nevertheless it has come to pass that in every city in the country young men have established themselves as landscape architects and horticultural advisers, depending on knowledge



Plate 12

A VINE-EMBOWERED HOUSE

The growth of vines on this building gives it the appearance of a European chateau. Somehow it suggests the mellow tone of age to which a quiet dignity appertains. The shrubs near the foundation are *Spiræa Van Houttei* and the arching boughs of Elms are seen in the vignette. Near the porte-cochère is a colony of evergreens. Of course the real garden is in the back yard, and it is most sumptuous in floral finish.

gained from the printed page and the voice of the professor; and it is reasonably certain that many of them have never heard the voice of nature as expressed in the language of leaf and bud and flower; and many more do not know the difference between a budded tree and a society bud. And so it is that gardens are designed that look well enough on paper, but which are utterly impracticable, for the reason that the material used is lacking in hardiness or adaptability to its location. Often a man has a desire to beautify the surroundings of his home, and plants a shrub recommended by these academic advisers; but under the stress of summer drought and winter cold it dies, and with it dies that blessed inspiration. The money loss is considerable, but it is as nothing compared with the loss of faith in human endeavor and the utter blasting of that "hope deferred that maketh the heart sick." I therefore urge the reader to select his planting list with great care, and assure him that he will not go wrong if he follows the advice given in this book regarding the hardiness of varieties

CEMETERY LANDSCAPE GARDENING

CEMETERIES are parklike in their size but the resemblance goes no further. There is the same difference in their treatment that we find in the architectural treatment of churches and theatres. The architect who would design with indiscriminate taste churches and playhouses would have sensibilities so dull as to see no difference between that brooding of the soul which we call worship and the gaiety of a harlequin who has no thought beyond the present hour.

If the ground is not naturally rolling the surface should be gently undulated, and this can be accomplished in adjusting grades for the system of driveways which should be somewhat lower than the natural level. There should be no attempt at ornate or picturesque effects, but simply enough undulation of the surface to lend a charm to contemplation.

Cemeteries demand a simple style of treatment, and for that reason the fussiness of many detached flowerbeds is objectionable; and it is equally objectionable to plant shrubs of gorgeous coloring of foliage or flowers. The soul finds rest in large areas of unbroken lawn, and the sections reserved for burial should have very few trees and shrubs; and these should be of simple, unobtrusive kinds that give a quiet dignity to the landscape, relieving it of the gruesomeness which we commonly associate with the burial lot. About one section in five should be reserved for park and garden effects, the planting being grouped in heavy masses after the manner of natural groves; and it is well to remember that nature does things with a liberal hand. It is a common mistake of cemetery boards to try to make a big showing with a very small outlay, and shrubs are cluttered all over the grounds in a vain effort to beautify them, quite forgetful of the fact that real beauty is dependent on contrasts of open lawn and heavy border-planting, or to use the phrase of the portrait artist, on high lights and shadows.

A native growth of Elm, Oak, Beech, Ash or Maple is ideal for a cemetery site, partly because such trees usually grow on high land that has good drainage, and partly because these trees have a peculiar grace of outline and a beatitude of peace in their very pose. Where such trees are lacking they should be supplied,



Plate 13

PERGOLA IN CEMETERY

A new idea in cemetery architecture is the erection of a pergola on the family burial lot. It is an outdoor room of peaceful beauty, flanked and canopied with vines, and entirely free from the gruesomeness which we commonly associate with cemetery lots. The lines of the pergola should be very plain, the columns Tuscan, and the planting soft in tone. The practice of planting flowers of gorgeous color should be abandoned, as they are destructive of all suggestions of peace and rest. Mr. Edward Bok of Philadelphia, was the originator of this idea, and it is so sensibly conceived as to merit widespread acceptance. The above picture shows two adjoining lots similarly treated. The vines used are the Ives.

and the use of our Herculine Tree Machine will save twenty years in the development of a bare property by using trees six to eight inches in diameter. The former custom of planting weeping willows and other contortions is not in good taste, and is largely discontinued for the reason that they seem to make a mockery of our grief and are a mere travesty on melancholy; or to use a Bible phrase, they "laugh at our calamities and mock when our fear cometh."

Similarly among shrubs the varieties best suited for cemetery planting possess subdued tones of color, both in foliage and flowers, and their place is in large groups in the garden areas and along the fences and borders. The Privet, Philadelphus, Deutzia, Rhodotypus, Indian Currant, Dogwood, Spiraea, Viburnum, Bush Honeysuckle and Barberry are all suitable.

Evergreens should be used freely, especially near the entrance and antepark, and colonies should be interspersed through the cemetery itself. They give a peculiar sense of beneficence, and their presence conduces to revive tender memories of our dead, presaging in themselves a message of everlasting life. The dark-colored varieties of Pine, Spruce, Fir and Cedar are all suitable, if we only heed the caution not to plant detached subjects, but in colonies.

It is also well to remember that few evergreens are perfectly hardy, especially under the very trying conditions that prevail in a cemetery, where they get only perfunctory care at the best. *We advise cemetery boards to consult an expert* in such matters, as a mistake in planting is fatal to good effects, and not as easily covered up as a certain other kind of fatal mistakes which are covered up in the cemetery.

The average life of a burial-ground is three generations, and consequently it requires what may be called a progressive development, that it may grow in beauty year by year and feel and reflect the softening hand of time. It is certainly a delicate problem to forecast the development of a cemetery property, a problem demanding a certain artistic prophetic vision, and it is unwise to commit the making of plans to any but the most competent designers; and this the more especially when we reflect that generations yet unborn will share with us, even in greater measure than ourselves, the practical results of our work. It is a debt we owe to posterity to plan our cemeteries in an artistic manner and construct them in a way that will endure. We are building beautiful cities for the living; let us not neglect the "silent city of the dead."

And in order to preserve unity of composition, all work should be designed by a competent landscape architect whose artistic taste will connect the related parts into a beautiful bird's-eye view; and so far as practicable, the execution of the design should be under his direction. Such is the practice abroad, and it has resulted in the most beautiful cemeteries the world has ever seen.

In this country the art of landscape gardening has not yet come into its own. Many people are hardly aware that such an art exists. As a consequence it is the common practice to let the local surveyor "plat out" the grounds, and anybody who happens to have a team does the grading, a saw-and-hatchet man builds the fences, and trees and shrubs are planted here and there, hit and miss, to suit every whim of individual opinion, until in a little while the grounds look like the crazy-quilt of some tooth-



Plate 14

EVERGREENS FOR CEMETERIES

This is the sexton's residence, built a little to one side of the entrance to a beautiful cemetery. The picture shows the proper use and grouping of evergreens, and we feel at once the forceful effect of the mass. Adjoining the house and beyond it is a park section filled with Maple, Elm, and Beech. Again we have the open lawn.

less maiden aunt that time has overlooked. And finally when the cemetery board awakes to a realizing sense of the situation, it costs more money to undo the mistakes that have been made than it would to develop a new property.

Whilst in Europe the writer made a careful study of landscape compositions as applied to cemeteries, and much valuable information was gained which is at the command of anyone interested. Please write for any further information desired. Cemetery designing is a specialty with us, and our landscape organization is at your service for consultation and engagement.

The beautiful in nature teaches the lesson of the beautiful in conduct. It is a moral melody. There is a wondrous relation between that proportion which the eye detects and that subtle casuistry of act and circumstance which the soul alone perceives.

SHRUBS for SHADY PLACES

ON streets running east and west, half of the houses face the north; shall we plant nothing near the entrance? Can't we nestle some shrubs near the foundation? Fortunately for us, nature is a bountiful mother and in loving kindness has provided for all our needs. Some plants like a warm, sunny exposure, and others thrive as an undergrowth in the woods. It is therefore an easy matter to plant shrubs that will do well in shady places, and under the heading Typical Effects will be found a list of the best varieties. I do not mean to be understood as saying that they will all do equally well; indeed, most of them would do better with four or five hours of daily sunshine. Still, where extreme conditions of shade are presented, they will do quite well.

In this connection I will tell you a little secret, and I will even tell you the source of my cogitations. Some years ago I knew a very successful poultry-man whose chickens attended to business the year round. The egg output was just as regular and dependable in the winter as in the summer. Being in a communicative mood one day he told me the magic of his success: *Give the hens summer conditions in winter weather.* Sure enough he provided warm quarters and green food in the form of sprouted oats, and lo, and behold, they cackled a merry lay. The hens just for that laid an egg in his hat, and thus did the Henry Ward Beecher!!

When confronted with my problem of growing shrubs on the north side of buildings, I formulated his philosophy to fit the case and it reads, *Produce southern conditions on northern aspects.*

A good soil is not enough. Heat, light and moisture are necessary to produce growth. And yet, as a rule, not only the soil but the whole trinity of requisites are lacking on the north side of buildings. They should be carefully supplied.

First, the soil is poor. For years it has been a neglected spot. Even the growth of grass is scant. There is no vegetative potency in it. It is dead, inert matter, utterly devoid of humus. Change this condition by adding a good dressing of well-rotted manure.

Second, it is cold. The sun does not strike it. Well, warm it up by cultivation. Let the air in. A hard, neglected soil is always cold.

Third, the light is poor. That is not a serious defect. Plant shade-loving shrubs. (See list of shade-loving shrubs under heading Typical Effects.)



Plate 15

A SYLVAN RETREAT

This is a sylvan retreat of great beauty. The majestic Elm stands like a crowned monarch with a promise of peace to all who come under his protection. The lawn area is ample, the contour of the shrubbery beds is an easy sweep which satisfies the sense and opens deep vistas to the view. The vines that hang in garlands from the pergola are *Lonicera Halleana*, a very fast-growing and sweet-scented vine, and the shrubs at its base are for the most part cut-leaved Sumac and *Sambucus*, which give a rustic tone to the scene and make it very restful in effect.

Fourth, the ground is dry. Our prevailing summer winds are not from the north, and as most storms are wind driven, very little, if any, rain falls on the north side of buildings. This is especially true where there are wide overhanging eaves or cornices. Paradoxical as it may seem, the north side of a building is the driest side. Of course this can be remedied with the hose.

All these are simple things, but if properly attended to, you can depend on a strong, sturdy growth of shrubs on the north side of buildings. In the case of some shrubs, like the *Viburnums*, the bloom is rather scant, but the growth of foliage is most luxurious. The bloom is a secondary matter, after all, as we depend on the shrubbery mass for effect.

ROSES

THE love of roses is innate in man. The earliest records of cultivated plants tell us of roses. The literature of many lands in history, philosophy, poetry and song, enshrines the glory of the rose. When England's wars were fought, the rose of red and the rose of white received the tribute of contending hosts; and as long as men are brave and women beautiful the rose will grace alike the breast of valor and of gallantry. All nations acclaim her the Queen of Flowers by reason of her great beauty, and right royally she crowns herself with a garland of her own weaving.

Draper tells us that during the Moorish occupation of Spain, the Caliphs ventilated their houses with perfumed air brought by underground pipes from distant flower beds (see conflict between Religion and Science, page 141). If such luxury was vouchsafed to pagans in the fifteenth century, is not an American citizen of the twentieth century entitled at least to a rose bed in his back yard?

And this brings us to the point the writer has in mind, viz., that the suitable place for a rose bed is in the back yard. The rose is a special-purpose plant and, with the exception of the East Asian family, the *Rosa Rugosa*, and the well-known Sweetbriar, *Rosa Rubiginosa*, it does not lend itself to general landscape effects. When in bloom it is too dignified in aspect to comport well with the restfulness of demeanor which we like to associate with good garden influences. When not in bloom the wood is stubby and ungainly in growth, and the foliage becomes an easy prey to insect enemies, unless the bushes are kept together in solid beds and sprayed with a good control.

It is difficult to imagine a greater pleasure than comes to the possessor of a large rose bed. Fifty to one hundred bushes is none too many. A little bouquet of a few buds does not satisfy: it only excites the yearning for more. You want a vaseful for your table and a basketful for the hospital, church or club. Rose growing is the most democratic of all occupations: it make you feel kin to all life and eager for others to share your joy. And it is a beautiful fact that the more bloom you cut, the more the bushes produce. In this respect it is like loving: the more you give the more you have. "Giving is hoarding, extravagance is economy, and waste itself the very source of wealth." By all means plant a rose bed and feel the thrill of life.



Plate 16

ROSE-COVERED PERGOLA

An ell-shaped pergola showing the brick floor, border of California Privet hedge and thatch of roses and vines. The large-leaved vines showing on the right are Dutchman's Pipe, those on the left are Wild Grapes, and the canopy of roses consists of Dorothy Perkins and Ever-blooming Crimson Rambler.

VARIETIES OF ROSES TO PLANT

Many of the Hybrid Perpetual roses are indispensable for the amount and gorgeousness of the early summer bloom and the occasional buds that open in September. But the term "Perpetual" is a misnomer, for they are not perpetual in any sense. June Roses would be a better designation. About one-quarter of a rose bed should be of this class, and a quarter each of Hybrid Noisette, Hybrid Tea and Dwarf Polyantha. The last three classes are not strictly hardy, but what of that! Cover them up in the winter and have roses all summer! Why not? Is it not worth making the effort?

I am well aware that it is still the custom of catalogue-makers to recommend the so-called Hybrid Perpetual varieties to the exclusion of all others, and they expatiate on their hardiness and vigor of growth, both of which merits they possess; but when the man appears who can make them bloom all summer, I will say in the language of Bill Nye, "The coming man has arrived."

If you had a friend who had gone through all the labor, vicissitudes and discouragements of experimentation, through many years of alternating disappointment and success, and who had found at last with certainty the dependable varieties of roses, would you not gladly accept his advice in starting a rose garden? Let me be that friend to you! I have tested hundreds of varieties and know that my list is entirely satisfactory. Professor Liberty H. Bailey, of Cornell University, Editor of *Cyclopædia of American Horticulture*, says: "The success of the rose in this country is largely a question of the selection of varieties."

And in addition it is a question of how the bushes are grown. Bushes grown in pots in greenhouses are marketable in a few months from the cutting, and the soft, forced growth is not hardy enough to withstand outdoor conditions. These "bargain-counter" roses have been a source of much discouragement to planters, who are slow in finding out that cheapness does not consist in what you pay, but what you get for what you pay. There is also a great deal of unjust clamor against budded roses. The facts are that few roses strike roots on their own wood, and fewer still have enough vigor to become good bloomers when grown that way. With few exceptions budded roses are by far the best, requiring only deep planting to prevent the growth of suckers and the careful cutting out of those that may appear. The best stock to use here is the same as that used in Continental Europe—the Manetti rose stock. The Greening Nursery Company imports its rose seedlings from France. These are lined out in the nursery, budded the same year and marketed the year after, making virtually three-year plants; that is to say, they grow one year in France and two years in the nursery—quite different from the little slips grown in 2½-inch pots, forced with bottom heat in the greenhouse, and sold in a few months from the time of making the cutting.

As to form, rose beds should be narrow, so that all the bloom can be easily reached for cutting and the surface of the bed be



Plate 17

A BOWER OF RUSTIC BEAUTY

A rustic retreat in a picturesque garden on a hillside. The steps are of hewn ties with a landing three ties wide every fourth step. The furniture is in the same rustic style and adds to the restful simplicity of the scene. There is an outcropping of rough boulders on either side, like nature in undress holding communion with herself. The trees on the hilltop are Black Walnuts and Maples. The tall shaft of green in the lower foreground is *Thuya Pyramidalis*. Clumps of ornamental grasses border the walk. Taken altogether there is a wealth of quiet beauty in this garden bower which is worth ten years of added life to its owner.

all manageable with a hoe for cultivation. The most convenient is a parallelogram of any length, but with a width of only five feet. This will take three rows of bushes planted one foot from each border. Other designs are shown elsewhere in this book.

SOIL AND LOCATION

Roses luxuriate in a soil containing a good proportion of clay. It is all right for the subsoil to be all clay, provided it be spaded deep and is not hard pan. As for the surface soil, clay is simply not manageable, as it dries out and becomes so hard that it cannot be tilled. In such cases there should be added and thoroughly mixed with it about one-third part of good loam or light soil. When the soil is very sandy it is good practice to mix some clay with it—at least one-third should be clay. This tones up the soil wonderfully and produces bloom that is more lasting and of better color. For the same reason it is important that the ground be well drained, for a wet soil is always cold. And it is equally important that the rose bed have a sunny exposure; all-day sunshine is the best, though a location receiving the ten to three o'clock sun is very satisfactory.

PRUNING ROSES

The manner of pruning will depend on the varieties. Most roses bear their bloom on the current year's growth of wood and by removing all the small, weak canes and shortening the heavier ones about one-third, a cleaner foliage and a choicer bloom is produced; but an exception must be made of the Yellow Austrian roses, which bear their bloom like the apple on spurs of the old wood. In pruning these it is enough to remove superfluous branches that interfere with the general vigor of the bush, including of course such branches as have become old and weak. In pruning Climbing Roses it will be found that nature has done most of the work herself and in her own peculiar way, namely, by freezing out the weak and unripe wood; so that not much remains to do but to cut out the dead branches. It is a common mistake to permit a climbing rose to "feather out," that is, to grow a bunch of weak shoots at the base, which saps the vitality of the bush without accomplishing anything itself. About three new canes a year are enough to grow to replace the older wood as it dies out. This is the "secret of eternal youth" in growing roses, and by its means a rosebush is always young and never reaches the decrepitude of old age.

MULCHING ROSE-

BEDS OVER WINTER

In the North Central States the winters are so severe that all garden plants should be provided with a mulch of leaves or straw manure three to four inches thick. This is very beneficial to all plants, and the more



Plate 18

LOVERS' LANE

An artistic creation of cultivated beauty for park or large garden. A well-chosen blending of shrubs and trees and well-kept gravel walk gives the scene an atmosphere of privacy and repose much admired by the landscape artist. In the left foreground are Japanese Maples.

tender ones cannot retain their vigor unless helped along in this way. Plants, like animals, are very tenacious of life, and make a stubborn fight for existence even under very adverse conditions; but when all their energies are expended in a life and death struggle, they cannot bloom freely. This is especially true of roses of all kinds, but more especially of the Hybrid Tea, Hybrid Noisette and Dwarf Polyantha.

The best mulching material is a cover of leaves. Drive stakes six inches apart all around the rose bed, or, better still, put up a one-foot strip of poultry netting, and after bedding down the taller branches fill in with leaves a little at a time, beginning just before severe weather arrives for good, so that mice will have found their winter quarters and will not be likely to nest in the mulch that you make. Leaves are plentiful and sometimes quite a problem to dispose of. This disposition makes a double use of them, as they can be added to the compost-heap in the spring.

PERENNIAL FLOWERS

FOR OLD-FASHIONED HARDY GARDENS

THIS class of plants has many practical merits. Being perennial they grow year after year without renewal, and when once established will live for a generation or more with very little care. They bloom so freely that they are unsurpassed for cut-flowers; and their variety is so great that the garden is full of interest, from the little white Helleborus and Trillium which come to us as the first resurrection song of spring, on through the grand overtures of June and early summer, to the last, long requiem of fall when nature softly drops her pall of leaves above her dead.

And they have great artistic merits. The range of color, form, size, and time of blooming is so varied that there is no limit to their possibilities as garden material for the flower border and formal garden; whilst for the mixed border they are invaluable to color and liven up the shrubbery during the midsummer dearth of bloom.

These flowers made glad the hearts of our grandmothers, and many of us have childhood memories of the miracles of beauty they created. But for some unexplained reason they have been neglected for a number of years. In our vain search for something better many gardeners have planted tender exotics, with much loss of money and good feeling, with the result that there has come about a return to the old-time favorites. Meanwhile hybridists have been at work producing new strains and varieties, so that much progress has been made and, if they build gardens in the better land, the dear dames who mothered our mothers—and our fathers—must envy us, so great has been the improvement. It is enough to cite the case of the gorgeous Shasta Daisies which Luther Burbank has evolved from the little field daisies of earlier days.

Elsewhere in this book I publish a color chart as a guide to color compositions, and the reader is advised to consult it in planning his perennial garden, so as to avoid inharmonious combinations; for an assemblage of plants is not artistic unless relatedly connected in the grouping. It is unfair to affront the fair fame of flowers with improper arrangement.

It is also well to remember that each family has certain habits and peculiarities of its own. Some, like Sweet William, Achillea, Anemone, Columbine, and Coreopsis are low-growing and express themselves naturally in the foreground of the taller kinds.



Plate 19

NARCISSI IN THE WOODS

A driveway through a park bordered with Pheasant's Eye or Poet's Narcissus. In the background is the natural growth of woods—a fine combination of the natural and cultivated landscape.

Others, like Hollyhock, Helianthus, Boltonia and Rudbeckia are naturally tall-growing, and should be in the background where they serve as a foil for the lower plants, and have the breadth and scope of earth and sky to properly develop. Others still are of medium growth, like the Phlox and Delphinium, and fit in nicely between; but it is well to guard against planting them with such architectural precision that they form banks or steps or terraces, but rather should they be billowed in broken swells like the cheery abandon of the ocean-waves.

I append a few diagrams showing the proper grouping of perennials, and also a tabulated list of varieties according to height. For descriptions, see the Plant List at the end of this book.

HEDGES

IT is good practice to define the boundaries of a property if only to add structural force to the picture we have created, and this is effectively done with a hedge, formal or informal, clipped or unclipped.

By a hedge is meant a very compact growth of shrubs that stand like a wall of green fulfilling the double purpose of demarcation and protection, and fortunately for us there is a very wide range of trees and shrubs suitable for the purpose. Any plant of compact growth, that stands shearing well, may be used for making hedges.

Thunberg's Barberry makes a beautiful natural hedge, requiring very little trimming. The growth is uniform and dense near the ground. It has an abundance of small orange-colored blossoms very early in the spring and bright crimson berries all winter. Without doubt this is the best shrub for low hedges. The *English Barberry* and the *Purple Barberry* also make good hedges, but they grow taller and require considerable shearing to keep them in formal shape.

Probably the most popular hedge plant yet introduced is the *California Privet*. It has clean, healthy foliage, bears shearing well and is free from all insect enemies. Unfortunately, it is not strictly hardy and must be used with caution in northern latitudes. The *English Privet* is hardier, but the color is not quite so good, as it lacks the glossy sheen of the *California Privet*. The best of all the Privets is the *Regel*. This has a prostrate habit and makes a natural hedge of great beauty.

The *Japan Quince* makes a good trimmed hedge, although its foliage is somewhat scant. The bloom is a bright red and makes a great show in the early spring.

Other good hedge plants are *Lilacs*, *Bush Honeysuckles*, *Spiraea Van Houttei*, *Althea* and *Golden Syringa*. Nor must we forget the evergreens, especially *Thuya Occidentalis*, *Spruce* and *Hemlock*, all of which make beautiful hedges.

WINDBREAKS

WINDBREAKS are for the purpose of breaking the force of the wind, and most trees for this purpose are grown to their natural height. Evergreens are the best. The Pine, Spruce, Fir and *Thuya Occidentalis* are all good.



Plate 20

POMONA LANE

The view shows a lane or narrow driveway leading from the superintendent's house to the orchard on a gentleman's estate. The main features of the picture are the well-kept hedges of *California Privet*, which make a scene as beautiful as any of the far-famed hedgerows of rural England. Heavy plantings of trees make an effective background.

Windbreaks are especially desirable in regions of severe winter weather, as they lessen the force of the wind considerably and add much to the comfort of the people and whatever live stock they have to winter, whether outdoors or indoors. If planted on the sides of the prevailing winds which, in the Middle West and North Central States, are usually from the north and west, they will be found to check the force of the gales not only, but to deflect them upward, causing them to pass over the buildings. In places where much snow falls windbreaks also serve as snowtraps to prevent the formation of drifts near the buildings. The railroads of the Northwest protect their roadbeds in this way.

SCREENS

THE object of a screen is either to shut off an unpleasant view or else to give greater privacy to grounds by shutting out views from the traffic on the street; so that the owner and his family have the full use of the ground without being pilloried by the scrutinizing gaze of every passer-by. The idea is carried to its limit in the common English practice of building brick walls completely enclosing the yard; but it seems to the writer that a screen made of tall shrubs or small trees is in better taste, as it has the appearance of a natural barrier. It is remarkable what can be accomplished by good management and how even trees that are naturally large-growing may be kept in leash by pruning. One of the finest screens I ever saw was on a country estate in Germany, and it was made of *Norway Maple*, which is normally a very large-growing tree. Other good trees for the purpose are *Bor Elders*, most *Willows* and *Poplars*, and especially the *Russian Mulberry*. In France, where the foliage of the Mulberry is used to feed silkworms, the branches are cut down low to produce a dense growth of tender foliage and the new wood makes a fine compact screen. To produce a good screen any of the above trees should be planted two feet apart and cut down eighteen inches from the ground. It is better to begin with small young trees. Of course the evergreens, like *Norway Spruce* and *Thuya Occidentalis*, make good screens.

THE OUTDOOR PARLOR

A POETIC writer described the grounds about a house as the "Outdoor Parlor." This epigram idealizes the spirit of home, and is just what Talmage, in his ponderous way, used to call "wisdom in chunks, the hand grenade of truth." It is well known that a little money spent in improving grounds gives more real pleasure and artistic culture than ten times the same money spent in bric-a-brac. For about the price of a picture to hang on your walls you may have a living picture of your entire grounds.

Many places, however, are laid out without professional advice, and the results are often disappointing. A great deal of valuable material is wasted through improper arrangement and in-



Plate 21

VIEW IN GREENING PARK

Hedges have a great deal of beauty in themselves, and they are appropriate in nearly every garden. They can be used on the lot line, around formal gardens, and to border walks and driveways. The traveler in England is constantly impressed with the beauty of hedges as garden ornaments.

The above hedge is in the author's own garden in the antepark to Greening's Big Nurseries, at Monroe, Mich. It is made of *Norway Spruce*, and borders a gravel driveway which disappears in a graceful curve in the distance. To the right of where the automobile stands is the formal garden. On each side of the avenue is a row of *Norway Maples*.

artistic grouping. Most people know that thumping a piano is not music, that grunting words is not oratory and that a splash of ink is not a picture, but few people realize that planting trees and shrubs without regard to expression is not artistic.

The skillful gardener knows how to preserve large, restful lawn pieces where glinting light and cloud shadows delight the vision with their fitful play; he builds a fleecy sky-line with his border planting and regulates the ground line by the contour of his beds. He makes color harmonies with the varied hues of leaf and twig. His art, like all art, exists by expression and for the sake of expression. The magic of its spell is the secret of eternal youth.

Nor can the plea be made that a place is too small to need a gardener's advice. The smaller the place the greater the need of one who can concentrate expression.

FALL BULBS

THESE are a class of plants that store up nourishment in their roots in the form of large bulbous formations: hence the name. Most of them resemble onions.

Nearly all the bulbs used in this country are grown in Holland, which is at present the bulb market of the world. But as indicating the versatility of the American people and the wide range of soil and climate under our flag, it is pleasant to note the development of the bulb business in the Puget Sound district, where experiments have passed the tentative stage; and it is a hopeful sign of the times to see this "infant industry" assimilate the Asiatic cheap labor of the Pacific Coast, and thus remove what has been heretofore a very fruitful cause of international friction. Nevertheless we are still dependent on Holland for the bulk of our supply and probably will be for many years yet to come. Millions upon millions of bulbs are brought into this country every year, the first receipts coming in near the first of September and continuing for about three months.

These plants require so little attention, and are withal so cheap, that everyone can enjoy their beauty, from the dweller in a boarding-house who is monarch of all he surveys, within the rim of a six-inch flower-pot, to the merchant prince whose grounds are park like in extent.

SOIL

The most important requisite in the soil is that it be well drained, for bulbs are very intolerant of soggy ground.

Even when the ground is tiled it is well to raise the beds somewhat above the level of the yard, so as to shed surface water, and it will also be found that a slight convexity will be a material assistance to that end as well as display the flowers to better advantage. As to quality, the best soil is a friable sandy loam, enriched with well-rotted barnyard manure. If this is not available, bone meal will help; but in no case should fresh horse-manure be used, as the fermentation generates enough heat to kill the bulbs.

LOCATION OF BEDS

As the bulbs come in known, distinct colors, it is possible to execute very pretty designs with them, though few are more satisfactory than plain figures,

like a circle, oval or rectangle; and after the bulbs have ripened the ground can be occupied by bedding plants, like Geraniums or Salvias; or self-seeding annuals can be used, like Verbenas,



Plate 22

TULIPS IN BEDS

Beds of tulips at the intersection of walks in a park make a gorgeous show in the early spring. They should be planted in October or early November in well-drained, loamy soil, about three inches deep and four inches apart. Mulch with long manure and remove it when growth starts in the spring.

Nasturtiums, Poppies, etc., which require no care except thinning out. One of the most successful amateur gardeners that we know uses Verbenas exclusively to succeed the bulbs, and he has a very enjoyable sequence of flowers.

In natural gardens the best place for the bulbs is along the border of the shrubbery beds, and interspersed among the shrubs wherever there is an opening large enough to nestle a colony of them. Some of the bulbs, like Snowdrops, Crocuses, and Scillas can be naturalized in the lawn, and as they will be out of the way before the grass needs mowing they will come year after year without further care. Others, like the Poet's Narcissus, are fine to naturalize in the wild border.

REPLANTING

So far as the bedding kinds are concerned, like Hyacinths, Tulips, and Narcissi, when select bloom is desired it is best to get a fresh supply of bulbs every year; but ordinarily bulbs will give a satisfactory bloom about three years, when they should be taken up and divided. The large bulbs may be used again.

MULCHING

Before very severe weather comes on, the beds should be covered with straw, leaves or long manure to protect them from severe cold during winter; but care should be taken that this covering be not too thick and dense, as the bulbs are as likely to be injured by being kept too warm as by freezing. The covering should be removed as early in the spring as severe weather is over and growth commences.

SPRING BULBS and TUBERS

THESE plants are too tender to withstand outdoor exposure during the winter, and are therefore planted in the spring: hence the name. In autumn, before freezing, they must be dug up and the tops allowed to dry down, after which they should be cut off and the earth and old roots can be removed. Store in a cool, dry place, secure from frost, until spring.

These plants are not imported but are produced in this country and it will be noticed that only the Tuberose and Gladiolus are true bulbs. The others—Canna, Caladium, Dahlia and Begonia—have potato-like roots and are known as tubers.

A very good use of the Gladiolus is to color up the rose bed, especially of the so-called Hybrid Perpetuals, which have not many blossoms after the month of June. The Dahlia serves the same purpose among shrubs, as it grows about four feet high and its many branches are fairly loaded with gorgeous flowers. A few tubers interspersed among the shrubs will add a vivacious piquancy to the border that is very pleasing.

Many Dahlia plants are wasted every year on account of planting too early. The temptation is strong to put out the tubers as soon as the weather warms up in the spring—at the end of April or early May. It is a little secret of the florist's trade to plant late and the commercial cultivators around the big cities, who grow the Dahlia for exhibition bloom, usually plant from June 10th to July 4th.

The advantages of late planting are logical. It is the experience of everyone and more especially of those who are complaining of lack of success in flowering that a remarkable growth takes place in May and early June, when the tubers are first put out; that the plants grow and flourish for awhile, then stop, and the foliage grows smaller instead of bigger and dries up; and whatever flower buds may be formed go practically the same way. The



Plate 23

TULIPS IN FORMAL GARDEN

It is the month of April. Trees and shrubs have not yet felt the thrill of the new birth. Winter still sits in the lap of spring. But the Tulips are with us. The above garden shows solid beds—whole sheets of bloom—the colors distinct, gorgeous and plenteous. When the bulbs have ripened they are taken up and cellared for replanting in October; meanwhile the ground will be occupied during the summer with Verbenas, Portulacas, Mignonette, Pinks, Nasturtiums, Sweet Alyssum, Petunias, Phlox Drummondii or Poppy. These are self-seeding annuals that come year after year without care except thinning out.

plants never revive until the late fall, and in many instances not even then.

Late planting prevents all this, inasmuch as the first severe hot spell or drought is passed before the plants attain any size; in fact, they never stop growing. Another great advantage is that treated in this way no stakes are required. Roots can be planted close together in the row and they will resist wind and any ordinary gale without the assistance of a stake. They begin blooming in August and are practically never out of bloom until frost cuts them down.

Another system which I have adopted on my grounds apart from the late planting is to dig out quite a good deep hole, almost a spade deep, and inserting the tuber only let it fill gradually as the plant grows. This may not be necessary in all soils, but with mine it certainly was an advantage. Many growers who have followed my advice find the plan very successful.

WATER

SOMEONE has called water the universal manure. Certain it is that its presence in the soil is necessary for plant growth. Plants take all their nourishment in liquid form, or rather in a vapory attenuation of water. No matter how rich the soil may be in all the elements necessary for the growth of trees, if there is no water in it to dissolve those elements and carry them as crude sap to the leaves, where the function of assimilation is performed, no growth will be made.

Water is as necessary for trees and other plants as it is for the human system. A constant and sufficient supply of moisture is essential for all the vital functions of vegetation. From careful estimates made in this country and in Europe it is found that it takes about 400 pounds of water to form one pound of dry vegetable matter. More water comes up by capillary action through the various forms of vegetation in a day than falls at Niagara in a year. *Vide* Enc. Brit.

There is an annual precipitation of 26 inches in Michigan as reported by the government weather bureau at Detroit, and it is fair to assume the same amount of rainfall in the neighboring States. This means 300 tons of water per acre, which is ample to maintain a luxuriant vegetation if the ground is cultivated in the right way to retain it. There is really no substitute for cultivation, where cultivation is possible; but of course for herbaceous plants that grow so thickly as to occupy all the ground tillage is out of the question, and watering with the hose becomes necessary. With trees, shrubs and rose-bushes it is different: with them it is easy to keep the ground loose. This will prevent the loss of moisture by evaporation and, by permitting the air to enter, the soil remains sweet and in good heart to produce growth. Only during a prolonged drought should the hose be used and then with the utmost thoroughness, soaking the ground to the depth of the roots; and as soon thereafter as the surface soil becomes mealy and friable, cultivation should begin anew to conserve the water you have put in.

The average man, however, depends altogether on his hose. He looks so much like a gardener squirting water on his plants. But it is only appearance! He is a veritable Moloch of destruction. The little hose-cart that he wheels through his garden is a twin brother of the Juggernaut of India. More trees and shrubs are killed by excessive watering than by all the other agencies of



Plate 24

PARK SCENE ON BORDER OF A LAKE

"And the woods against a stormy sky their giant branches tossed."

—Hemans.

This is a park scene on the border of a lake, the row of Willows in the background being on the bank. A little bayou filled with aquatics is spanned by a bridge, and the walk continues to the left in a winding trail through the woods. The tree in the center field is a Sycamore, those to the right are Maples, with an undergrowth of Viburnums, Barberries, and Prickly Ash. Near the bayou is a clump of Solidago, more commonly known as Goldenrod, and Phalaris Arundinacea, quite generally known by the common name of Gardener's Garters.

death and destruction that beset the garden's welfare and its care.

Of course when followed by cultivation watering becomes an innocent amusement; but it is the constant daily squirting of water without cultivation that is objectionable. It does harm by compacting the surface soil and excluding the air, by making the soil cold and reducing bacterial activity, and above all by establishing capillary action, so the water that is put on, in evaporating, carries up with it the water that is in the root-field and doing good.

The farmer has no forced water, and yet he has the best possible success by tillage only; for by its means he conserves the natural rainfall. And after all it certainly seems reasonable that his time-tried methods are correct and worthy of imitation.

FACTORY GROUNDS

THE beautiful refines. It is an educator. It is an incentive to higher endeavors. And so at last the great truth is found that it pays to surround the factory with trees and shrubs and flowers and beautiful lawns; that a mechanic in such surroundings is not only a better workman but a better man; and that the product of his labor is of better quality and of greater worth.

In pursuance of this well-known fact many factory owners and managers make liberal yearly appropriations for beautifying their grounds; and in some instances the operatives themselves have banded together in friendly co-operation, each department assuming some part of the work or some portion of the yard and vying in friendly rivalry to surpass in garden excellence. A case in point is that of the employees of the Grand Trunk shops at Battle Creek, Mich., who divide their grounds in ten parts, allotting one to each department, including the counting-house and office department. Prizes are put up for competition and much interest awakened among the employees not only, but throughout the entire section of the city adjoining the factory.

Many benefits accrue, not the least of which is the spirit of fellowship and *bonne entente* that prevails. And as a business proposition it pays to have fine surroundings, the impression made on visitors and prospective clients being the most convincing argument of the prosperity of the concern and the quality and popularity of its product.

On account of the imperative demands of manufacturing interests for good shipping facilities, most factories are located on the outskirts of cities near a belt line of railway service; at any rate that is where they ought to be. In such locations the land is cheap and a tract sufficiently large for a small park is available adjoining each factory, where the employees may rest at the noon hour in the cool shade of large trees, and surrounded with the incense of flowers they gather strength and poise and calm for toils to come; and the owners and managers of these industrial enterprises—those who bear the burden of responsibility—those whose brows are wrinkled with the carking cares of endless details—those to whom a payroll looms like a huge spectre to be met and vanquished weekly—they will find a ramble through the park a soothing balm; and when lost in a labyrinth of business the Ariadne of Rest will give them back the long-sought clew.

But no matter how small the grounds may be there is always room for some vines on the walls of the building, for some trees



Plate 25

GROUPS OF LITERARY AND SCIENTIFIC INSTITUTE CONNECTED WITH RAILROAD SHOPS

In a small Michigan city the employees of a railroad shop have banded themselves for mutual help, and the little building in the background is where they meet for study and intellectual calisthenics. In the foreground is where they meet for pleasure and relaxation. It is their garden. They have divided it in ten sections by a system of walks, and each of the ten departments of the shop is allotted a section to plant and manage as it sees fit. As might be expected among high-grade mechanics, much ingenuity is exercised. Heretofore the main dependence has been tender bedding annuals, but the intention is to change gradually to hardy shrubs and perennials.

on the street line and on the sunny side of the property, and for a few shrubs near the foundation walls; and even in extreme cases where there is no ground at all available, window boxes can be suspended from wires or held on brackets, and some Bay-Trees or others that grow in tubs, placed on the steps and in the entrance-way, will give a cheerful note to the surroundings. A place of business, or any other place, without some form of living greenery looks as dull, dreary and desolate as perdition would look with the fires left out. A business that does not look on the cheerful side of things is already on the brink, and a factory that has no form of vegetation around it except the moss on the boss's back is beckoning to the financial adjuster, and listening with eager ears for the horn that blows the everlasting toot.

Why not listen to the love-song of the birds in your garden instead? Why not join in their joyous chorus? Joy is wealth.

College and School Grounds

Artistic Landscapes and Botanical Gardens

"One impulse from a vernal wood
May teach you more of man,
Of moral evil and of good,
Than all the sages can."

SO wrote Wordsworth long ago; so believes everybody to-day. "Back to nature" is now the educational slogan. We know now, if we know anything, that real education consists in knowing the things that touch our lives, the things of every day—the common things of our work and play. The best university education is merely an extension of the kindergarten idea—for are not men but children of a larger growth? Blessed be Froebel! He builded better than he knew!

And in harmony with this idea a number of educational institutions have established school gardens where the boys and girls become acquainted with the nature of flowers and vegetables by the actual care and cultivation of a small plot of ground. This is a grand and splendid step forward; but so far not much more has been done than the annual distribution of seed. Some of the more progressive school directors have gone a step further and established *botanical gardens* for the benefit of the natural science class; so that within a small compass there is brought together a large collection of trees and shrubs and perennials to be studied, text-book in hand, under the teacher's direction. This method gives a far more intimate acquaintance with plants and their habits than the old way of merely memorizing names. Other schools have gone a step beyond this, and with the aid of our landscape service have laid out their grounds in an artistic way, securing at once the double purpose of beautification and nature study. It has been found that students with such surroundings are more submissive to discipline, and school attendance has become a delight as well as a duty; whilst above and beyond all this is the beautiful fact that young men and young women have become more responsive to the social amenities.

The Greening Landscape Company is in full sympathy with this educational movement, and the attention of school boards is especially called to the fact that we render all three branches of landscape service. We make the plans, furnish the stock and do the planting, all in the most artistic and workmanlike manner, and we positively guarantee satisfaction. There is no disappointment with the Greening System.



Plate 26

BOSTON IVY FOR COVERING WALL

Ampelopsis Veitchii or Boston Ivy on a wall of St. Mary's College, Monroe, Mich., showing the regular overlapping of the foliage. Very effective to cover and tone a blank expanse of wall. Turns to beautiful crimson and purple tints in the fall, and is covered with clusters of small elderlike berries all winter.

There is an unfounded fear that the school children, especially the boys, will abuse the trees and shrubs and disfigure or destroy the gardens. The facts are exactly the other way. The ideals of children have changed in the exact proportion that we have relaxed our rigid discipline. We have found out at last that love is the only reforming force and the rod has been laid away with the other instruments of savagery to be seen no more except in the showcase of antiquities. We now treat our children with love and kindness and by surrounding them, at home and at school, with beautiful flowers they are sacredly guarded by the better angels of their own natures. Without exception where school gardens have been planted the boys and girls regard themselves, individually and collectively, as the especial conservators of their beauty and woe betide anyone who would mar or molest them. It is the story of Tom Brown at Oxford told over again, with slight modifications. Love is stronger than fear. The love of trees stimulates the imagination, refines the feelings and deepens the affections. Friedrich Froebel, the guardian angel of children, was a forester's apprentice at fifteen.



Plate 27

The Herculine Tree Machine for Moving Large Native Trees

IN every community, or in the country surrounding every town, there is a native growth of trees such as Elm, Oak, Ash and Maple, and when such trees have reached a diameter of six to eight inches of trunk, with a spread of head running from ten to twenty feet, they are very valuable landscape material. Heretofore it has been impossible to move such trees with any degree of success and all improvements had to begin with small nursery stock. All this is changed, however, and by the use of our Herculine Tree Machine it is now possible to convert a barren piece of countryside into a place which the slow processes of nature would require twenty years to produce. This device is especially valuable for parks, cemeteries and large estates where ample funds are available for the purpose, and by its use we can build a forest in a fortnight. Our machines lift a tree with a large ball of earth which makes growth certain, and we can now promise you landscapes while you wait, or rather landscapes without waiting. All you have to do is to show us the tree and we will move it for you anywhere you wish. From anywhere to anywhere is our slogan.

The tree shown on the machine is an American White Elm of eight inches caliper measurement. It was transplanted in the spring of 1909 and in the summer of the same year appeared as shown in plate 28.



Plate 28

GREENING'S ORNAMENTAL EXHIBIT

Exhibit of Greening's Big Nurseries on the State Fair Grounds at Detroit, Mich., Fall, 1909. The shrubs in bloom near the tent are *Hydrangea Paniculata*; the tree with a globular head is a Bay-Tree. You see the Michigan Building, which was erected by the State at the Louisiana Exposition, St. Louis. It was afterwards donated to the Michigan Fair Association and removed to Detroit. The tall shrubs near the foundation are *Spiræa Van Houttei*, *Spiræa Aurea*, *Symphoricarpus Rubra*, and those in bloom are *Hydrangeas*. The large trees are native Elms transplanted with our tree-moving device. The young man in the picture is Howard Taft, a student with the Greening Landscape Company. He is a son of Prof. L. K. Taft of the Michigan Agricultural College and nephew of President Taft.

WATER GARDENS

WATER has a peculiar charm for most people, and a small water garden, stocked with fishes and filled with aquatic plants, adds greatly to the picturesque beauty of home grounds. This is especially true of certain yards that are naturally dull and inert and which, somehow, refuse to respond to all ordinary treatment. In such cases the introduction of a water garden gives a new aspect to the place, transforming it at once into a scene of freshness and animation.

It is easy to grow water plants. All they need is water, sunshine and good soil enriched with cow manure. The basin may be made of cement or puddled clay, while for the smaller varieties common tubs will do. On large estates, containing ponds or sluggish streams, a great assortment can be grown, including the Wild Rice, Cat-tail, Sweet Flag, etc., but care should be taken to keep the seed moist from the time it is gathered until sowed in the water where it is to grow. Mr. Carl E. Schmidt of Detroit informs me that he tried for years to colonize Wild Rice in his marshes in the northern part of the State, but always without success, until it occurred to him to pack the seed in moist cotton, when the experiment was successful.

In building water gardens it is well to use some tufa stone for the borders and, in large ponds, floral rockeries and fountains can be built of it in the form of small islands. Tufa stone is petrified vegetation showing the stems of plants in many dainty colors.

Natural scenery is the most pleasing when it comprises a body of water, or what may be called a waterscape, and the estate that possesses a small lake, creek or rill, has a prize beyond price. It then becomes a major garden feature and, being supplied naturally, there is no initial cost, the outlay being solely for trees and plants between the approaches to the water. A small body of water is made to look quite large by masking portions of it from every viewpoint, as this partial concealment makes it suggestive of larger areas hidden in the offscap. In the case of streams of some size, if the topography of the ground allows it, a charming effect is gained by intercepting their course with rocks, shelving them in such a way as to form musical cascades.

Near a lake or large stream the Willows are very appropriate, especially the old-fashioned Babylonica, and the newer varieties, the Wisconsin Willow and Thurlow's Weeping Willow. All



Plate 29

PERGOLA OVERLOOKING A GARDEN

The original meaning of a pergola is that of a structure overlooking a garden from some high vantage point, and the one pictured above fulfills these conditions; however, it is not the meaning that we attach to the word to-day. The above view shows a park scene with a lagoon beautifully banked, a geyser fountain springing out of a rockery in the middle of it, a beautiful cement bow-bridge and some trees in the distance, mostly Maples and Elms.

branch near the ground, slightly incline towards the water and give a delightful shade. In connection with these the tall spire-like Lombardy Poplars give delightful contrasts, as each intensifies the peculiar charm of the other. Of shrubs for this purpose none surpass the Dogwoods, in variety.

When artificially created, water effects are somewhat costly, and it is rather unusual to build them on a large scale, a fountain or tiny rill or a basin for plants being all that is necessary; and this is always an interesting part of a garden, if care is exercised to guard against studied effects and to invest them with an air of naturalness.

Anyone intending to lay out a water garden will do well to consult with the Greening Landscape Company, as expert advice is necessary for each individual case. We have had a wide experience in this class of work, all of which is at the command of patrons.

Improvement of Country Homes

"God Made the Country and Man Made the Town"

TO paraphrase a well-known saying of Lincoln's, the Lord must have loved the country for he made so much of it. The happiest people on this earth are the dwellers in the country, and it is only repeating a truism to say that the cities depend on them for subsistence not only, but for their very continuance. Actuaries and others skilled in vital statistics assure us that the average duration of city-bred people is only three generations, and that the constant influx from the country is all that saves the cities from utter extinction; and yet in spite of this awful fact, as awful as the fact of death, there is an increasing migration from the country to the city, a migration so great that within a few years it has reduced our rural population from 65 to 35 per cent. of the total of our people.

This is a deplorable state of affairs and, in my opinion, the remedy is to make the country more attractive, so that its boys and girls will fall in love with their old homes and, incidentally, with each other; and as they grow to manhood and womanhood they will find a full measure of happiness under the sacred roof-tree that sheltered them in their days of youth. The lure of the country must outweigh that of the city.

Farming is the foundation of our national prosperity and there is nothing too good for the farmer and his family. Above all things he should make his surroundings beautiful. There should be large, flower-bordered lawns, and trees and vines for shade and comfort, whilst roses, lovely roses, give their perfume like incense to the little winged god of love.

For a great many years I have kept in touch with farm life by living on a farm myself and by meeting my fellow-farmers at their institutes and at the meetings of the State Horticultural Society, of which I am a life-member; and on many occasions it was my great honor and privilege to address these bodies in lectures treating of horticultural matters in general and landscape art in particular. Moreover, my company has a representation of nearly one thousand agents, dealing largely with farmers, and their vast correspondence during many years has given me rather unusual facilities to study the especial wants of country homes.

The Greening Landscape Company offers its triple service to all clients. Interested parties will please consult our local representative, who will take measurements of their properties from



Plate 30

AN ENGLISHMAN'S HOME

This is the house of an old-country Englishman, and in accordance with his wishes hedges form a very important part of the landscape, reminding him of similar scenes in rural England. This hedge is composed of California Privet. The Rose-bush at the corner of the porch is a Crimson Rambler, and the shrubbery detail near the house is a composite colony of many varieties, green foliage predominating, as it makes a splendid contrast with the red brick walls of the house. The shade-trees are Elms.

which we will make a sketch showing the style of treatment proposed and submit an estimate of cost.

In places where we have no representative, owners will please write for our profile sheets and directions for making rough sketches showing all existing features on their properties, and telling the nature of the soil, elevation, aspect, etc., from which our artists can make a sketch drawn to scale and indicating location and grouping of each variety of trees and shrubs. In such cases, too, our planting instructions are so complete that the owner can do his own planting or have it done by his own gardener, at the same time having the benefit of our artistic design and selection of the best planting material. Our aim is to help you build a garden which will be a success and a source of enjoyment and satisfaction to you and your family for a great many years. A good garden, like good wine, improves with age, and the foundation is so important that it is worth while starting right.

POSTGRADUATE COURSE IN LANDSCAPE GARDENING

MANY of the colleges throughout the country have added to their curriculum a course in landscape gardening and they are doing good work with the facilities at their command, probably as good relatively as the medical and law schools do for their students. But the point is this, that whereas the matriculant of a law or medical school is usually willing to "make haste slowly" and practice under the direction of an experienced practitioner for a year or two, before offering advice on his own account, the graduate of a landscape school seldom undergoes the same disciplinary training with a competent superintendent of landscape construction work. On the contrary he hits the high places right away. He installs himself in the big numbers of the big office buildings in the big cities; and to be consistent he charges a big price for his plans. All this is radically wrong. "Books alone can never teach the use of books." But trees alone can teach the nature of trees.

"Know ye the rapturous tenderness of trees,
Their kindliness, their beatitudes?
...List to the speech
Leaf holds with leaf and bough with swaying bough"

My own son is receiving instruction at Cornell and taking the full course in landscape gardening under the most able educators in the country; but after the completion of his studies there I shall expect him to take a postgraduate course with me at the nursery and in my office, and thus acquire that intimate knowledge of trees and plants which is indispensable for successful gardening.

And I take this opportunity to invite all these young skyscraper gardeners to come down from their high offices and work with me in the broad open air of the fields, and under the tutelage of nature acquire that experience which comes only by doing.

And the invitation is extended to all young and middle-aged men and women, whether college trained or not, who love the communion of nature and who appreciate the dignity of a life-work devoted to making this world a little better than we found it, to join the Greening Landscape Association and represent the Greening Pictorial System of Landscape Gardening in their home towns. There is room in every community for a good worker,



Plate 31

CHAUTAUQUA OF LANDSCAPE ART AND HORTICULTURAL SCIENCE AT GREENING'S BIG NURSERIES, MONROE, MICH.

Hundreds of people attend the lectures on gardening given at Greening Park. Among them are park superintendents, instructors and students from agricultural colleges, architects and young men and women who study landscape gardening as a profession. Our mammoth nurseries are worth making a long journey to see.

and what is also important to many, you can earn while you learn. There are many men and women throughout the country in whom the art instinct lies latent, and who need only the spur of enthusiasm to become most excellent gardeners. We learn to do by doing. Write for particulars.

Our plan of work is in line with the present trend of educational movement, which is distinctly toward manual training; so that while the head is being filled with facts the hand acquires dexterity in putting them to practical use. Besides, we do not really know a thing until we tell others about it, and the reflex action comes in the form of an approving smile. Learn and tell others. Then you will know. Knowledge, like happiness, was born a twin. How did Byron say it? Oh, yes—

"All who happiness would win
Must share it;
Happiness was born a twin."

A Lesson in Tree Propagation

THIS field lecture by Chas. E. Greening is given in the budding field on the first budding day. The group comprises the budders, wrappers, about a dozen students from agricultural colleges, the superintendent of the budding gang, and the writer, who in this instance is the talker also. Naturally, the propagation of trees is the most important branch of nursery work, and all employees are carefully drilled in the various operations. The planting of the seed, the growing of the seedling, the lining out in nursery rows, the budding and grafting of pedigreed scions—these are the various processes from which come the trees that are sold to planters and which afterwards become the fruiting orchards of the country. The care and experience necessary to produce trees of correct form in body, the best root system, a well-developed head, a healthy and rugged constitution and a standardized pedigree—all these



Plate 32

are treated at the nursery in the most thorough manner. Upon the work of the experts in the nursery who take part in propagation depends the successful development of American orchards.

The Study of Conifers -- A Field Lecture to Agricultural Students in Forestry

THIS view shows Mr. Chas. E. Greening delivering a lecture at the Greening Nursery to students who are taking a course in Forestry. These lectures give a wide range of information, for the reason that they are based on knowledge gained by traveling in Europe where forestry has long been a question of paramount importance, and on the practical ideas of the writer with reference to the kinds of trees best adapted for timber on different soils and in different climates. In my tour abroad it was my privilege to interview the greatest foresters in Europe, who gladly shared with me their vast fund of information on this subject, including the propagation of seedlings and the management of young forests until they become merchantable trees; in particular did I inquire and was freely told regarding the insect enemies of forests and the proper remedies to be applied.

Forestry studies have always interested me, and I am at present engaged in formulating a working plan, applicable to American conditions, and which will soon be floated in the proper legislative channels. I have no doubt of its success if managed on a National basis, and I have confidence



Plate 33

enough in my countrymen to believe they will give the project their enthusiastic support when properly presented to them. In the meantime I ask the reader to Fletcherize on the subject of Forestry.

A Lesson on Nursery Spraying

A FIELD lecture by Charles E. Greening on scientific methods of tree and plant spraying given to college students during their summer postgraduate course in horticultural study. Students come here for the object of getting practical knowledge along the lines of our experience. One of them remarked, "One such practical lesson as is given here is worth many months of theoretical study in an agricultural college." The students in the group represent six different agricultural schools from as many states. They are bright, energetic young men and most of them are sons of wealthy people.

The lecture on spraying includes a study of the life-history of the different insects, that they may be met and fought at their most vulnerable stage of development, together with the best methods of combating them and warding off their attacks on trees and plants, as well as guard against



Plate 34

their dissemination by the application of the proper remedies. The lecture also treats of fungous diseases and the necessary remedial measures to prevent injury by them.

A Lesson in Soil Renovation by Means of Green Manuring

THIS scene is on the Greening Nursery grounds, and pictures Mr. Chas. E. Greening delivering a field lecture to a class of agricultural students on soil renovation, one of the greatest problems that confront the American nation at the present time. Our methods of farming have been wasteful in the extreme, with little thought of maintaining the productivity of our land and, as a result, the farms are being rapidly exhausted of their fertility. Note the abandoned farms of New England; and note also the wheat lands of the Red River Valley in Minnesota and North Dakota which, in their virgin state, produced an average yield of forty bushels per acre, and sometimes as much as sixty bushels per acre, which is now reduced to thirteen bushels in Grand Forks County, in the very heart of what was affectionately called by the early settlers, "The Garden of the World." An interesting feature of this lecture is the demonstration of practical results in the turning under of various kinds of farm crops for green manuring to obtain certain results. The picture shows an instance in the Greening Nursery where a heavy crop of red clover is turned



Plate 35

under, and the camera man happened to catch the students at an interesting moment. That much interest is manifested in this work is plainly displayed on their faces.

ANNUAL FLOWERS

A NNUAL flowers are a class that fulfil their full cycle of existence in one year. The seed is sown in the spring and the plants are in their prime in a few weeks, when they bear their burden of bloom, ripen their seeds and pass on to their death by fall. They sustain the same relation to the garden that the butterfly does to the other denizens of the air—ephemeral in existence but beautiful beyond compare during the short period they are with us. And it is nature's law of compensation that as the plant does not live perennially from the roots, it bears an enormous amount of flowers and seeds to perpetuate itself. For this reason annuals are very desirable garden material to color up the flower border and to make a few yearly changes in the appearance of the landscape. Shrubs make up the structural framework or what may be called the anatomy of the yard; perennial flowers clothe it with garments of beauty; and the quick growing annuals are the jewels that serve as extraneous ornaments.

But as these are merely incidents to a garden, as jewels are incident to dress, only the most popular sorts will be considered and recommended; and as the Sweet Peas, Nasturtiums, Pansies, and Asters are more generally cultivated than any others of this class, they may be regarded as the first choice of most people. For this reason cultural directions are given at length for these and, somewhat more briefly, for a number of others.

I also append a list of plants which are perennial in the South—about as far north as Memphis—but which freeze out in the North and consequently must be treated as annuals and renewed from seed every spring. They are very showy.



SWEET PEAS

MOST of the Sweet Pea seed in this country is grown in California for the large seed houses, and as they all have the same source of supply there is not much difference in the quality. Many varieties are sold in which the colors are distinct, but it is a lot of useless bother to keep them separate. I recommend the use of high-grade mixtures, as these contain all the standard colors and strains, and you will always get some plants of superfine excellence that you would not get by buying a few varieties by name.



THE TEN COMMANDMENTS

- 1.—Buy from a reputable dealer and get fresh seed.
- 2.—Sow early. The best Sweet Pea man we know sows on the 17th of March—that's his rule—and he always has bushels of bloom. He prepares the ground in the fall. In the latitude of Cincinnati and further south it is a common practice to sow in the late fall.
- 3.—Sow in clay loam if possible; if your ground is sandy add clay. Spade it deeply and enrich with well-rotted manure.
- 4.—Use a trellis five feet high and run the rows north and south, so each side will get its proportion of sunshine.
- 5.—Sow in double rows in trenches about five inches deep. Cover about an inch at first and gradually fill the trenches as the plants develop.
- 6.—Plan to have your plants three inches apart. Sow thinly and when they are up, thin out.
- 7.—When the dry weather comes, say about July first, mulch the ground well to preserve moisture.
- 8.—From then on water about once a week and do it very thoroughly—literally drench them.
- 9.—If bothered with red spider or green aphids spray with tobacco tea or kerosene emulsion.
- 10.—Pick the flowers as soon as they open. Do not let them form pods; as maturing the seed will exhaust the vitality of the plant.

ASTERS

THIS is the flower for the million and for the millionaire. This plant, like the Pansy, is sensitive to heat and should not be started too early. It is best to sow the seed about May 20th, so they will start blooming in September and last until frost. The seedlings should be twice transplanted to produce strong, stocky plants with good roots. When about three inches high set them three or four inches apart, and when they begin to crowd set them where they are to grow, about a foot apart.



The Aster is a Good Cut-flower

PANSIES

PANSIES are grown so easily and sold so cheaply that it is not worth one's while to propagate them. They come in a very great variety of color, and they should be planted about six inches apart in a rich loamy soil that is cool and moist. For early summer or fall bloom plant in the open; for midsummer bloom plant in half shade. These flowers have very short stems.

NASTURTIIUMS

THIS is the most easily grown of all flowers. It is practically insect and disease proof and accommodates itself to a great range of soil, though it is well to guard against a soil that is too rich. When grown on a clay loam it is liable to run much to leaves and not bear many flowers; and when that is the case it is well to give it "wholesome neglect" so as to partially starve it. It is at home on a medium light soil, where it will bear an abundance of bloom. Its one weak point is its very short stems.

As the plants do not take kindly to transplanting, the seed should be sown where they are to grow, thinning them to about a foot apart so they will have plenty of air and light, which is necessary for their development. They need a warm, well-drained soil. There are dwarf varieties for bedding and edging, and climbing varieties that need the support of a trellis.

As in the case of Sweet Peas I recommend mixtures which, as a rule, will give a good assortment of colors.

OTHER GOOD ANNUALS

The **Candytuft** is very valuable for cutting. It is a low plant suitable for edging.

Cosmos are very beautiful autumn-blooming plants; splendid for cutting; height five to seven feet and need some support when the plants become large.

Mignonette is a fragrant flower and a general favorite; requires a cool location; sow in April and again in June for continuous bloom until fall.

Poppies produce a dazzling display of the brightest colors; sow where they are to grow, as they do not bear transplanting. The seed is very fine—about the size of tobacco seed—and must not be covered deeply; simply pressing in the soil is enough. The poppy is a great favorite among the Norwegians and Swedes of North Dakota and Northern Minnesota, where most beautiful strains have been produced.

Marigold is another favorite; free bloomer; one foot high.

Nicotiana Affinis, a tobacco-like plant suitable for a shady corner; finely scented; flowers white, trumpet-shaped.

Portulaca, a good bedding plant suitable for sandy, hot, dry locations.

Ricinis Zanzibarensis, a superb tropical-looking plant known as the Castor Bean; grows ten feet high and has leaves two feet across.

Sunflower, a tall, stately plant growing to a height of ten to twelve feet and bearing large, showy flowers a foot across. The seeds are edible and used as a substitute for peanuts in Russia. The Russian colony in North Dakota call it Russian peanuts, and grow acres of it for domestic use.

HALF-HARDY PERENNIALS

A number of perennial flowers are not hardy enough to live over winter in northern latitudes and for all practical garden purposes they must be regarded as annuals, for we must start new plants from seed every spring. Among the best of these are the following:

Snapdragon, bearing beautiful spikes of gaily-colored flowers and covering a long period of bloom.

Carnation, have beautiful fringed flowers, mostly double and in many colors; resemble hardy pinks.

Petunias, require good garden soil and are fine for bedding, as they bloom from early June until killed by frost. Give sunny location.

Salvia Splendens, a favorite for bedding and is most effective in large beds, as they stand about thirty inches high and have an erect pose. The flowers are in long, glowing scarlet spikes. Known in different localities as Scarlet Sage, Scarlet Dragoon and Burning Bush.

Verbena. The seed must be started early so the plants can be put out in the open ground about April 25th and set 18 inches apart. They are low and spreading. A rich soil and sunny location are required. It is a self-seeding plant and good to succeed bulbs.

Zinnia, a constant bloomer of easy culture and the colors are very brilliant. Attains a height of 30 inches.

Marvel of Peru, commonly known as Four-o'clock. The plants are large and each needs about two feet of space each way to properly develop. The flowers are funnel-shaped, white, red, yellow or striped with these colors. They open about four o'clock in the afternoon, remain open all night and generally perish before noon the next day. The abundance of new flowers produced affords a constant succession of fine bloom. The French call it Belle de Nuit, an appropriate name which means Beauty of the Night. Sow seed in open ground.

Geranium. The constant succession of bloom till frost comes, the brilliant colors of the flowers and the exquisite leaf-markings of some varieties render the geranium very desirable for bedding. It is mostly propagated from cuttings, but propagation by seed is the only way to produce new varieties.

RAISING MONEY BY SUBSCRIPTION FOR PARKS AND PUBLIC PLAYGROUNDS

IN small cities and towns that have no park board and in which the aldermanic council is timid about making park improvements, fearing to offend a few ultra-conservatives who have lime in their bones, and who, being unable to advance, advocate a *laissez-faire* policy for everybody—in such cases the raising of money by subscription is an easy way out of the difficulty. The scheme is also feasible in large cities where there is a general recognition of the need of parks, but where the bonding limit has been reached by other expenditures. Raising money in this way is not unusual; it has been done many times and is being done right along for the erection of churches, or as an inducement to secure the location of factories, the building of railroads, etc. The need of parks and public playgrounds is so imperative for the health and enjoyment of the people, that when the matter is properly presented all good citizens gladly contribute their share towards securing them. As a rule such results are brought about through the initiative of one man of energy and public spirit. The idea takes root in his mind; he mentions it to a few friends; each encourages the others with the soul-fire of enthusiasm; a public meeting is called; a committee of prominent business men is appointed to solicit subscriptions; a site is secured and a *Park is Born*.

INDIVIDUAL BEQUEST OF SITE AND ENDOWMENT In many towns there are some men of large means who are anxious to bestow some such benefaction on their fellow-citizens, and who will gladly donate a park as soon as the wish for one is formally expressed. Sometimes one man will donate the site and another the endowment for development and maintenance. The important thing is to secure a proper site, after which a private endowment or public subscription is easily obtained. Surely there is no better way for a man to perpetuate his memory and to win the gratitude of his fellows than by the gift of a park to the people, and I am firmly convinced that this form of public bequest is a greater blessing to the workers in the great industrial centers than the erection of monuments, convention halls, or even libraries; and I am hopeful enough to believe that it will have a large vogue in the future.



Plate 36

PARKWAY PLANTING

This view illustrates the beauty of planting shrubs on the parkway of a public street as shown in the left background. The parkway on the right does not show but it is developed in the same way and looks like the shubbery border on the right of the entrance drive. The shrubs most used for this purpose are *Berberis* in variety, but chiefly the low-growing kind known as *Thunbergii*, the *Snowberry*, *Indian Currant*, *Dogwood* in variety, *Rosa Rugosa*, *Spiræa Van Houttei* and *Hardy Ornamental Grasses*.

WHAT ONE CITY IS DOING

The city of Saginaw, Michigan, has been singularly fortunate in this respect. It has received Jeffers Park from John Jeffers, Bliss Park from ex-Governor Bliss, and is about to become the recipient of Rust Park from Hon. Ezra Rust, who at his own expense has converted a large tract of miasmic marsh land into a beautiful island park, the work costing approximately one-quarter of a million dollars.

And, after all, what is more attractive than well laid-out parks? Detroit is noted throughout the country as a beautiful city—a fame which she richly deserves—and she owes her glory to her extensive park system.

When you visit a strange city, do you not instinctively seek the parks? And do you not unconsciously gravitate towards them?

And when your friends from the country visit you, do you not fill the lunch-basket and invite them to spend the day at the park? Do not parks typify and reflect the embodied conscience of a people in the same sense that the eyes are called the "windows of the soul"? Would you care to rear your children in a town that has no park nor public playground? Do we not, to a great extent at least, get our ideals from our surroundings? Judge Lindsay, who has made a special study of child life in the great cities, and to whom we are largely indebted for the establishment of juvenile courts, says: "No child is worse than the home he comes from;" and perhaps it will yet be told by some gifted tongue that no man is better than the town he comes from. Our surroundings make us what we are. Parks are public educators. They make for good citizenship, for patriotism, for love of country, for a cheerful life, for a beautiful character and a well-rounded mentality. Let us all hope for the coming of that day when there shall be at least one public park in every town.

EUROPEAN

PLAYGROUNDS

In Germany, the land of philosophy and the birthplace of educational systems, where the psychology of the child mind is best understood, public playgrounds for children are generally provided. They are heavily screened with shrubs and, in some cases, guarded by what we would call in this country a juvenile police, to protect them from boisterous intrusion. Most of the grounds are free, but, in a few instances, a small fee is demanded to provide for maintenance. This fee rarely amounts to more than three cents and secures the unusual privileges of tennis courts, baseball grounds, etc. The Germans are noted for their sturdiness of character and physique, and much of their greatness is due to the scientific development of children. Much of our own greatness is due to the Germans, for, more than any other people, they have helped to make our country what it is.

In France, where nearly everything is done better and more artistically than elsewhere, the same conditions are found and most beautiful play gardens are provided for children; the one unfortunate thing being that there are not many children. Tupper's felicitous phrase, "A babe in the house is a well-spring of pleasure" has never been translated into the French language—at least it is not yet perceived as a beautiful truth by the French people.

The Swiss have many playgrounds—how could it be otherwise in the land of Pestalozzi, the forerunner and prototype of



Plate 37

JAPANESE GARDEN

This is the recessed entrance to a Country Club. The design is Japanesque in conception, the lantern being a direct importation from Tokio, and it serves as the motif for the planting. On the right of the entrance is a colony of evergreens and low-growing shrubs. On the left are families of low shrubs, *Deutzia Lemoinei*, *Golden Syringa*, *Japan Barberry*, and *Indian Currant*.

Froebel? Is it any wonder that Switzerland was the first republic in Europe, and that she possesses a happy and prosperous people?

Educators, the world over, now believe that a child should be trained through its natural activities and that all growth, mental and physical, should be pleasurable. Education is a development, not an acquirement. The one way to develop a child to the full measure of its capacity is to provide natural associations that are agreeable and let the little mind bloom and blossom as freely as the flowers that give their perfume to the happy air.

"Suffer little children to come unto Me and forbid them not, for of such is the Kingdom of Heaven," is gospel enough to rejuvenate and redeem the world.

Conservation of our Forests and Reforestation of Denuded Lands

ONE of the economic problems that arise in the development of a nation is the maintenance of its timber tracts. First, there is the period of pioneering, when much of the primeval forest is wastefully destroyed by axe and fire to make room for fields of corn and wheat necessary for the existence of the pioneer and his family. About the same time the commercial lumberman makes his appearance, and under the sway of his ruthless axe the grand monarchs of the forest that have taken centuries to develop are felled, and soon the whole country is stripped of its timber growth. This is called industrial development and we have become so accustomed to the abuse of words that some of us believe it is.

Our forest resources were so great that many people supposed them to be inexhaustible. Nature, in her patient way, had grown an enormous crop of timber, and in our impatience to harvest this crop we were more wasteful than prudent. Not only did we fail to provide for the renovation of the forests which we destroyed, but the branches and other timber-waste were left to dry and become tinder for the final devastation by fire, until that portion of our national domain became a vast tract of blackened ruins. It is only during the last administration that the idea of conservation has been organized into a governmental policy, and, as is usual in such cases, after the first spasm of reform, the policy has been enforced in a very vacillating way. Even as I write, the forces of conservation and the forces of destruction are engaged in a sort of Kilkenny cat convention in St. Paul, and we know not yet whether we shall begin to conserve or continue to destroy.

At present we have no well-defined national policy of conservation, and cannot have, until the question is absolutely divorced from politics—until our forests cease to be regarded as the legitimate loot of the powers that be. The actual work of reforestation is largely left to individual initiative and we are indebted for what little has been accomplished to a few wealthy enthusiasts led by the intrepid Pinchot.



Plate 38

SECTION OF THE FORESTRY DEPARTMENT AT THE GREENING NURSERIES

The growing of seedlings of various kinds of forest trees is a very important department of the Greening Nurseries. Millions of young trees are grown yearly for forestal purposes. Many varieties are represented—Pine, Spruce, Cedar, Fir, Larch, Maple, Ash, Catalpa, Locust, etc.

NATIONAL JURISDICTION

The old battle of states' rights must be re-fought, and in this new contest we must align ourselves with the sublime Lincoln, who gave the clearest definition ever made of state and federal rights: "What concerns only the state must be controlled by the state; what concerns the whole nation must be controlled by the nation at large." The preservation of our forests concerns the whole nation, and it is and must remain a question of national jurisdiction. But this reform, like all other great reforms, must come from the people themselves. Kings did not voluntarily surrender their power, and those who profit by our lassitude and lethargy will whisper low lest we be awakened from the stupor of indifference. Nor must we depend on the politicians; for, though they seem to lead, they follow most abjectly.

GREENING COURSE OF STUDY IN FORESTRY

But happily for us there is already a well-established current, or perhaps I should say an undercurrent, of popular sentiment demanding the conservation of our natural resources and the reforestation of cut-away lands; and this is shown by the establishment of forestry courses in our agricultural colleges and the number of bright young men who enter upon said courses of study. As a further illustration I cite the case of twelve agricultural students who attended the field lectures given by myself at the Greening Nurseries, during the season of 1910, nine of whom expressed a desire to specialize in Forestry.

The mistakes of the past cannot be avoided. The mistakes of the present should be corrected, and there must be no mistakes in the future.

We must not only cease to destroy, we must begin to produce.

We must not only cease to waste, we must check natural waste.

LOSSES FROM STORMS

Last winter, during my hunting trip in the South, I met a number of lumbermen whose lands were swept by the equinoctial storms, leaving many trees uprooted and broken. These are pounced upon by certain beetles that live on fallen timber and completely ruin it in about two years. The operators, being unable to harvest this fallen timber before its destruction by insects, suffer a considerable loss, and many of them become discouraged. What individual effort cannot do, the nation must do, or provide the means for doing. Why not limit the area of individual holdings, thus increasing the number of lumber operators, and make it possible for each man to properly husband his own resources?

RESERVATION AND REFORESTATION

Again I call attention to the prairie states which occupy relatively a large portion of our territory, and which are fast filling up with a prosperous agricultural population. The soil of these prairie states is so rich and abundantly productive of cereal and orchard crops that they will continue to attract the better class of farmers, and the land will rapidly increase in value. Farms that the government sold for \$1.25 an acre a few years ago are now worth \$100 to \$200 an acre. Would it not have been a sensible policy to reserve some of these lands for forestry purposes? And in the present condition of



Plate 39

THE CREATION OF AN ARTIFICIAL FOREST

The creation of forests was a dream of the oriental imagination. The Arabian Nights abound with tales of forests formed by magic—by the waving wand of some love-lorn knight. They were peopled with nymphs and fairies and in the new-made sylvan aisles the Dryads danced.

But the actual building of forests is an accomplishment of the modern world, and the things that are being done to-day, by the light of silvicultural science, surpass in scenic splendor the wildest invention of Scheherazade's fertile brain. Some of our great captains of industry are constructing forests of great extent, even surpassing the immense hunting preserves of old England's aristocracy. I refer especially to the Rockefeller estate at Pocontico Hills, and to that of the late Mr. Harriman in the Adirondacks.

The creation of such a forest is done by means of the promiscuous planting of a large variety of native trees, and to the equally promiscuous planting of a great variety of shrubs as an undergrowth, all blended in a natural effect. This kind of planting is not intended for the purpose of obtaining timber, the object being simply to produce a particular kind of sylvan scenery, which cannot be gotten in any other way. In all my hunting expeditions I have made a special study of the shrubs that grow in forest conditions and which we usually call underbrush, and I invite the correspondence or consultation of anyone desiring to produce a forest of this kind. A winding drive through such a forest is nature's own tonic for the nerves.

affairs, would it not be a wise policy at least to replant our denuded forest lands and provide for the ever-increasing demand for lumber by the prairie states as well as by the increasing population of what were formerly our lumber-producing states.

The need of lumber is a fundamental fact in our national economy, but aside from this there is the further fact that the destruction of forests affects unfavorably the climatic conditions of a country, its rainfall, and the preservation of moisture in the soil. All history bears witness to this truth. The empires of the past have vanished with their forests, and the land once "flowing with milk and honey" is now a desert waste. Across the gulf of time, from the mausoleums of the past, where nations groaned their last, there comes a wail that no nation without forests can endure.

Shall this nation endure?
SHALL THIS NATION I say yes; and I ask my fellow
ENDURE? citizens to join me in further-
 ing the work of reforestation.

By word and deed let us do what little we can to stop the despoiler while we may, and let us make partial amends for our national sins of forest destruction by agitating for the replanting of our denuded lands; and when we read Bryant's Forest Hymn, "The groves were God's first temples," let us hang our heads in shame for the desecration of those temples, and swear that while we live we will consecrate ourselves to the cause of reforestation and undo the mischief of the past.

PLANTING OF A few farmers realize the
WOODLOTS forsaken appearance of their estates without some forest growth, and already we see the advent of the woodlot, where certain portions of their farms are planted to trees of various kinds—Catalpa, Locust, Ash, Maple, Spruce, Pine, etc., seedlings being used and the cost not very great. These small plantings will give some returns in fuel-wood within a few years; later they will yield fence-posts and lumber fit for the manufacture of furniture; whilst the permanent forest-growth will become a priceless heritage to future generations.

For a great many years reforestation has been a matter of impassioned interest to me, and I have made many experiments and gathered much valuable data that is at the command of any one who desires exact and dependable information. I am in position to recommend certain kinds of trees that will grow into money very quickly, and prospective planters who want the best returns for their investments are invited to advise with me.

FORESTRY FOR PLEASURE

This character of forestry is different from that which is intended for timber production, requiring the planting of an undergrowth as shown in plate 39;



Plate 40

GARDEN ENTRANCE

Here is a plain Colonial pergola used as a garden entrance. On the left is a group of *Berberis Thunbergii*, and on the right is a floral rockery filled with Alpine plants. This rockery is built there to justify the curve in the walk. Beyond the rockery are subtropical varieties of *Yucca*, *Plume Poppy* and hardy *Pampas Grass*. On the pergola is the climbing rose, *Dorothy Perkins*, and the vine *Aristolochia Siphon*, commonly called Dutchman's Pipe, which, with its large heart-shaped leaves, makes a fine covering and screen.

and this undergrowth demands a very particular treatment. Some shrubs and small trees must have a great deal of sun, whereas others are shade-demanding. This is one reason why I spend so much of my hunting season in the woods, where my fondness for plant life is gratified by many observations. My field-notes contain much valuable information on the subject, and men of large means who wish to start a forest as a hunting preserve will do well to compare notes with me before making their investments.

DEPARTMENT OF REFORESTATION

Commerce was recently established, and under this department there should be the strictest application of civil service rules.

There should be established at once as a part of our governing machinery a Department of Reforestation, in precisely the same way that the Department of

BUILDING ROADWAYS

THIS article has no reference to the building of highways. These are usually constructed under the supervision of a city engineer or road commissioner, who works according to certain well-defined specifications. In the case of highways that are built partly with state appropriations, the state highway commissioner furnishes the specifications, these having become standardized by use.

Nor do I write for the information of the owner of a large estate, for when an extensive system of driveways is needed it is better to call in the services of a professional civil engineer, or consult the county road commissioner who, as a rule, will be found able and willing to advise in the matter. It is the business of such people to keep posted on local conditions and they will often know where the best road-making material can be obtained.

MACADAM

ROADWAYS

On very small properties where there is only light travel, cinders, tan-bark and clay-gravel make good wheeling, but none of these, with the exception of a thick bed of clay-gravel, will make a pike that will resist the wear of a heavy automobile, and none of these are serviceable on a more than 10 per cent. grade, as the rains will undermine and wash away the material of which the roadbed is made. Cinders will bind and become hard as cement if about twenty per cent. of black loam is mixed with them and, in a rolling country, if cinders are used at all it will be found necessary to mix in this proportion.

But, nowadays, in building roadways we must take account of the ever-present automobile, and the only substances that will resist this wear are cement and macadam. The former is very desirable on a small property, for it is easily kept clean, and the tone is in keeping with the usual architectural treatment of such properties; but on an estate which is treated as a natural garden, macadam is better. It will require yearly attention to maintain it in good order; especially must the small water-holes that result from wear be filled up and rolled. Cement curbs define the edges and make a very trim effect; and where a walk is needed, one curb can be made 15 to 18 inches wide, which is sufficient for ordinary foot-travel.

Good drainage must be provided. Besides sloping the roadbed to provide for surface drainage, a row of tile should be laid below the frost line, underneath each curb. An excavation eight inches deep must be made. First fill with coarse stone, about egg size, of such uniform thickness as to be not less than three and one-half inches after thorough rolling. Next add from one-half



Plate 41

NATURALIZED NARCISSI

It increases the floral variety of large grounds to naturalize hardy plants in masses to produce an effect similar to a wild, uncultivated border; and beyond the first planting these flowers need no care, being left to express themselves naturally, untrammelled by human direction. Following this idea an open wood takes on an added interest when margined with Iris, Ferns, Narcissi, Cardinal Lobelias and Lilium Superbum. The above picture shows a large mass of Narcissi in bloom.

to, three-quarters of an inch of stone screenings and roll again. The amount of screenings used must be somewhat less than enough to fill the voids in the stone. After this apply a layer of fine crushed stone of such uniform thickness as to be not less than two and one-half inches after thorough rolling. Above this apply about three-quarters of an inch of binder screenings, wet down thoroughly and roll. The amount of screenings in this case should be slightly more than enough to fill the voids. This roadbed, with a little annual care, should last a lifetime.

RAILROAD LANDSCAPE GARDENING

RAILROAD people are very progressive. More than any other industry the railroads have helped to develop the natural resources of this country. They are now leading the van in beautifying the towns and cities through which they pass by the artistic planting of their station grounds. The Detroit United Railway has undertaken a systematic campaign of improvements by developing from six to twelve stations a year and has appointed me as their official landscape gardener. On some of the larger grounds very elaborate gardens are laid out, including small parks planted with shade-trees and many shrubbery details. The view here pictures the power-house at Ypsilanti, Mich., and shows what can be done to make beautiful even the surroundings of car-barns. Instead of the usual accumulation of old iron and other rubbish we find here a lovely setting of shrubs and well-kept lawns. As there is a great deal of careless travel to and from the barns, guard-rails, made of gas-pipe, were used near the walk to prevent the employees and others from making a short cut across the lawn. The two beds in the foreground are in the park-way; that is, on the street next to the sidewalk. There is a similar planting on the other side of the building and at the rear. Even the approach to the power-house and coal-sheds is made beautiful by the combination of shrubs.

But perhaps the most noteworthy fact connected with this improvement is that it is done as an investment. People like to travel on a line of railroad that caters to the intellectual and æsthetic culture of its patrons, and I predict that the time will yet come when the railroads will not only provide beautiful station grounds but will provide bouquets of flowers for their traveling guests. At certain stations uniformed attendants will board the trains and give a complimentary bouquet to all passengers, a practice now in tentative use by the Michigan Central Railroad at their Ypsilanti station.

I had a peculiar experience at the Ann Arbor station of the Detroit United Railway. The waiting-room is wedged in between other buildings and there was absolutely no ground near it. Now, making a garden without ground is very much like playing Hamlet



Plate 42

CAR-BARNS OF DETROIT UNITED RAILWAY AT YPSILANTI, MICH.

Showing Landscape Improvements One Year After Planting

with Hamlet left out; but I found a way out of the difficulty by using Bay-trees in tubs and hanging flower-boxes under the windows. The results were very satisfactory and added greatly to the beauty of the waiting-room.

DETROIT UNITED RAILWAY

Detroit, Mich., Sept. 7, 1910.

The Greening Landscape Co., Monroe, Mich.

Gentlemen:—It gives me much pleasure to state on behalf of my Company, that the landscape gardening that you have done for us is most satisfactory.

Aside from the great improvement made in the appearance of our Station Grounds, the general layout and tone of the work has been frequently most favorably commented on by others.

Yours very truly,

F. W. BROOKS, Vice-President.





Plate 43

The Tuller Hotel Roof Garden, Detroit, Michigan

Designed by CHAS. E. GREENING

IN the cities space is very valuable. The people on the pavement are in the prison-house of the panting populace—in the straight-jacket of a congested crowd. God's great out-of-doors is on the roof. Thank heaven for the roof!

During the early summer of the present year the Tuller Hotel, of Detroit, Mich., installed a high-class cafe and assembly hall on its roof, twelve stories above the din and dust and dirt of the street, and at once drew unto itself a very select clientele. About this time Mr. Tuller opened correspondence with me and, in accordance with his wishes, I prepared plans for a roof garden in keeping with the sumptuous appointments of the cafe, of which the above is a sectional view.

It is curious to note the evolution of an idea. There was a time when our hotel table decorations consisted of a few flowers; indeed, many of the flower vases of the Barbizon period were made to hold but a single bud. As time passed on and the appreciation of flowers became more general, the vases were enlarged until they were, in fact, miniature flower gardens—they contained huge bouquets of flowers. Later, the custom arose of using living

plants, and the Ferns and Azalias had a widely accepted vogue. Still later, the *Araucaria excelsa* was used. Now the climax has been reached in the building of huge garden cafes; and the above picture represents the best class of that type.

It will be noticed that the large plants are in tubs. They consist mostly of Bay Trees, several varieties of *Thuya* — *Pyramidalis*, *Occidentalis*, *Hoveyii*, *Globosa*, *Chinese Compacta*, etc.; a few Palms were also used. The roof has a wide overhanging cornice which is made attractive from the street by grouping the larger Cedars at the corners and on the projecting buttresses over the windows.

The idea originated with Mr. Tuller, whose business initiative has created one of the finest cafes on the American continent. The credit of conceiving the plan is all his own: the only meagre credit that is mine is in helping him work out the details. That the American people enjoy beautiful surroundings is evidenced by the fact that the patronage of the hotel and cafe was doubled within a short time after installing the garden.

THE SPIRIT OF THE HIVE

MAURICE MAETERLINCK says that a single bee cannot make honey, for the reason that a bee separated from its fellow bees is without industrial intelligence. A bee can be productive only when working in connection with other bees. This he calls the Spirit of the Hive.

This law of nature is applicable to men. Co-operation is the secret of accomplishment. One man by his unaided effort cannot do much. There must be the feeling of human service, the desire to help our fellow beings, and above all, the brooding, creative instinct. It is for this reason that I have organized The Greening Landscape Company and gathered about me a force of practical gardeners. Each one of us by our individual efforts cannot do much. We are more or less like the bereaved bee that Maeterlinck tells us of; but associated with a number of other gardeners we become imbued with the Spirit of the Hive, or what the German people call the "Zeitgeist," and co-operation being the dominant idea the best possible gardens are the result.

A number of my friends wonder why, at my age, I have undertaken the enormous labor of preparing this book for publication, and by way of explanation I wish to say that my nursery business and other enterprises have been very successful. I have reaped the reward of honest endeavor and accumulated a competence sufficient to enable me to retire from further activity if I were so inclined. But a summer spent in touring Europe has convinced me that America is very backward in its landscape attractions, and I have set my heart on doing what little I can to make my country foremost in beauty as she is now foremost in industrial activity. To further this good work I have secured the services of a staff of able specialists—artists, engineers, superintendents and construction foremen—who work under my directions; and this operating force of experts devotes its entire time and talents to making and executing designs for landscape improvements. Like my fellow workmen, the Spirit of the Hive has taken possession of my soul, and I expect to devote the rest of my days to developing a more beautiful America. I cannot conceive of a nobler ambition for a man than to leave the world a little more beautiful than he found it.



Plate 44

THE HIVE

For a front view of this building where the Spirit of the Hive prevails, see plate 31. A number of bees in the process of incubation are also shown. Many of these, in time, join our hive and become most enthusiastic workers.

HOTEL TULLER

L. W. TULLER, PROPRIETOR

Detroit, Mich., Sept. 17, 1910.

Mr. Chas. E. Greening, Monroe, Mich.

Dear Sir:—We wish to advise you that our Roof Garden Café, which is at the top of our building is now open and running along very nicely indeed.

The suggestions you gave as to the floral decoration have called forth nothing but praise from our guests and the beauty of the plants which you furnished us, and the originality with which they have been selected and distributed about the garden have certainly added to the beauty of our Roof Garden, and for the assistance rendered to us, please accept our thanks. The idea of a café filled with beautiful plants such as you furnished us with, appeals to the people and has most certainly added to our patronage. We feel sure from our own experience that a floral café will call forth the patronage of the people.

Again thanking you for your many kind suggestions to us as to the floral decorations and choice of plants, and hoping that we can see the idea become universal, we are

Yours very truly,

HOTEL TULLER,

Per L. W. Tuller, Proprietor.

Greening's Color Chart

THE accompanying chart will be found of great assistance in designing gardens, especially formal gardens, where the effect lies largely in the perfection of the color scheme. The points of the triangle show the three great primaries from which all other colors are produced. Diametrically opposite these places are their perfect contrasting colors, which for convenience may be called secondary colors. The points on the circle situated midway between the primary and secondary colors show the middle tones, or half colors, with their true contrasts directly opposite. To show the use of the chart as a determiner of harmony we will take as an example, purple. Moving along the circle on each side of purple we find its harmony decreasing as we leave it until we reach its most imperfect tones, turquoise and scarlet. Continuing the round of the circle, we approach its contrasting colors, gradually getting more pleasing until we reach its perfect contrast, yellow. The dots marked on the line towards the center, white, denote the various tones of purple produced by its mixture with white; any of these tones forms a harmony with pure purple.

This may be called a prismatic chart. It corresponds to the chromatic scale in music, and is a perfect guide in color compositions.

I am well aware that many people regard this as an over-refinement in taste, and to them a jumble of color—a sort of scrambled-egg effect—is agreeable in the same sense that rag-time music is agreeable to the untrained ear. At the same time it is very certain that the higher pleasures of gardening—the æsthetic pleasures—the pleasures of the soul—are found where the chords of color are in perfect harmony. Landscape art largely depends on the taste of the gardener in being able to create a harmonious combination of colors and contrasts, such as will prove pleasing and restful to the eye. The study of harmonious color-blendings in the grouping of trees and shrubs, or the laying-out of a flower bed, constitutes one of the cardinal features of the Greening Landscape System.

RAG-TIME GARDENS

A musical director of my acquaintance calls rag-time music the slang of music, just as certain vagrant words are called the slang of human speech; and there is, indeed, a wonderful resemblance between literary and musical compositions, the qualities that make them classic being

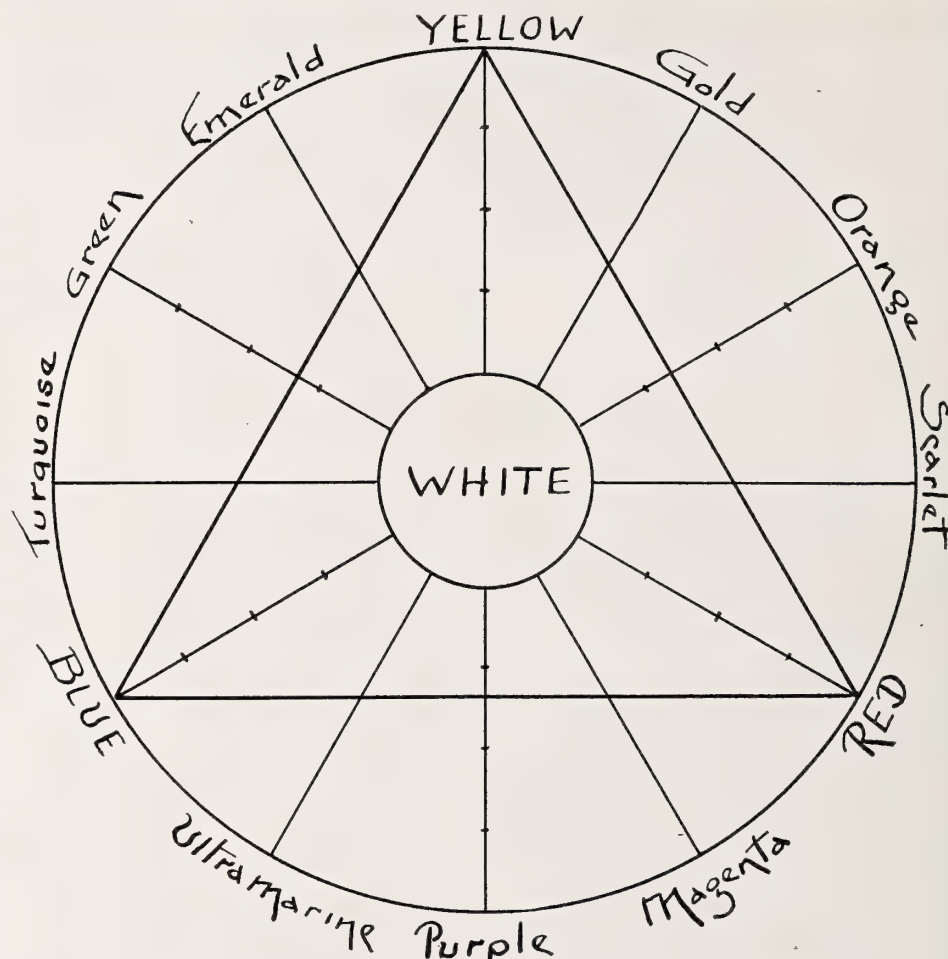


Plate 45

purity of style and sublimity of conception. The same criterion is applicable to garden compositions, and detached plantings of color-daubs that have no rhythmic association with the general theme of the landscape, are, properly speaking, but vulgar garden slang, or to use the popular expression, they are rag-time gardens. Of rag-time gardens we have a superabundance; of classical gardens, but a few.

The sense of sight is our most precious possession and the one that is first cultivated. Few things in life are more amusing than to see a little child in semi-bewilderment at the mystery of some brightly-colored objects. As the mind develops and the constructive faculty is awakened, the kaleidoscope ceases to be a toy and its symmetrical designs suggest patterns for carpets, wall paper, mosaics, flower beds, etc. It is probable that the lower animals perceive the beauty of color and enjoy it as much as we do; and it is reasonably certain that birds are keenly sensitive to it, else why do they bedeck themselves so gaily to charm their mates? Even moths are susceptible to the allurements of color, and it is nature's plan to secure the cross-pollination of fruits by inviting their visits through the beauty of flowers.

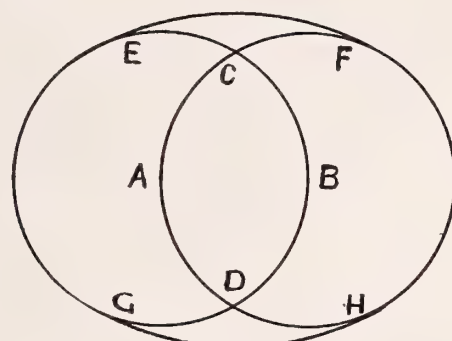


Plate 46

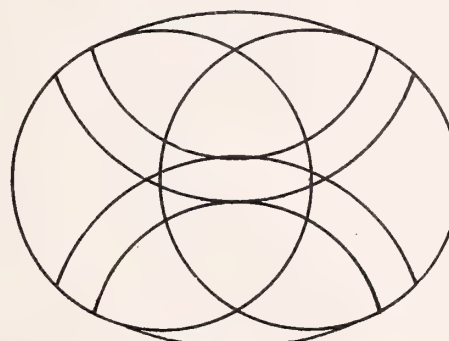


Plate 47

THE ELLIPSE AND HOW TO DRAW IT

THE ellipse is a beautiful figure that fits well in all kinds of gardens. It can be used to change the box-like effects of a small rectangular yard, whilst on larger properties it will be found a good form for the cut-flower or rose garden. It may be enclosed with a hedge or bordered with a grass walk.

First determine the length and direction of the major axis and divide it into three equal parts at A and B in plate 46. From the center A at the distance AB describe the circle BGE; and

from the center B, at the distance BA, describe the circle AFH. From the center D at the intersection of the two circles, at the distance DE, which is twice the length of AB, describe the arc EF; likewise from the center C, at the same radius, describe the arc GH. The resultant figure is a true ellipse. Plate 47 shows other curves that are easily studied out and it will be seen that the ellipse offers many variations of interior arrangement.

Plates 48 and 49 are two of the resultant figures.

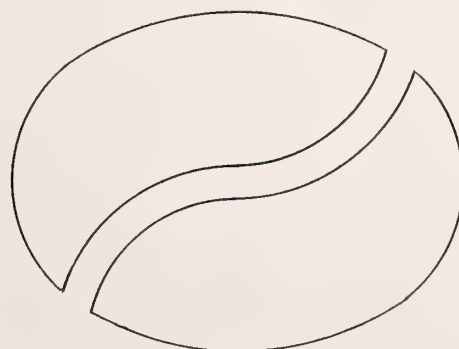


Plate 48

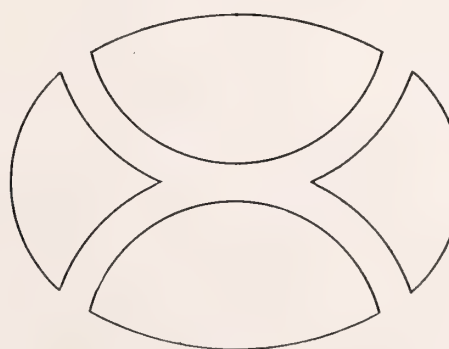


Plate 49

TYPICAL EFFECTS

TREES AND SHRUBS SUITABLE FOR CERTAIN SPECIFIC USES

TREES FOR STREET PLANTING

Elm, in variety	Linden, in variety	Tulip Tree
Ash, in variety	Sycamore	Oriental Plane
Maple, in variety	Horse Chestnut	Catalpa speciosa
Oak, in variety	Black Walnut	Poplar, Carolina

TREES THAT WEEP OR DROOP

Camperdown Elm	Kilmarnock Willow
Tea's Weeping Mulberry	Weeping Mountain Ash

TREES WITH PENDULOUS BRANCHES

American Elm	Babylonica Willow
Wier's Cut-Leaved Maple	Wisconsin Willow
Cut-Leaved Weeping Birch	Wild Cherry

TREES WITH ORNAMENTAL FOLIAGE

Aralia Spinosa	Maidenhair Tree	Koelreuteria
Ailantus	Cut-Leaved Birch	Kentucky Coffee Tree
Black Walnut	Locust	Russian Mulberry

TREES WITH COLORED FOLIAGE

Geneva Maple	Purple-Leaved Plum	Bronze-Leaved Ash
Schwedler's Maple	Purple-Leaved Beech	Golden Poplar

TREES WITH COLORED BARK IN WINTER

Cut-Leaved Birch	Sycamore	Oriental Plane
White Birch	Colorado Willow	Golden Ash

TREES WITH SHOWY FLOWERS

May

Judas Tree	Cornus, Florida	Crabs, Flowering
Chinese Magnolia	Horse Chestnut	Bird Cherry

June

Mountain Ash	Thorns, in variety	Lindens, in variety
Laburnum	Catalpa speciosa	Virgilia lutea
Chestnut, American	Koelreuteria	White Locust

TREES WITH ORNAMENTAL FRUIT

Hackberry	Mountain Ash, in variety	Oaks, in variety
Cornus Florida	Sassafras	Walnut
Thorns, in variety	Bird Cherry	American Chestnut

SHRUBS FOR SHOWY FLOWERS

May

Forsythia	Spiraea Arguta	Rhodotypus
Japan Quince	" Thunbergii	Honeysuckle
Flowering Almond	Lilacs, in variety	Calycanthus
Spiraea prunifolia	Spiraea Van Houttei	Berberis, in variety

June

Deutzia gracilis	Weigelia, in variety	Buckthorn
" Lemoinei	Cornus alba	Pæonies, in variety
Rosa rugosa	Lilac, Josikæa	Elder
Viburnum opulus	Syringa, in variety	Deutzia crenata

July

Spiraea Billardi	Hydrangea Arborescens	Spiraea A. Waterer
------------------	-----------------------	--------------------

August and September

Althea, in variety	Japan Corchorus	Clethra
Hydrangea paniculata	Hamamelis	Caryopteris

SHRUBS FOR SHADY LOCATIONS

Symphoricarpos alba	Cornus, in variety	Deutzia gracilis
" rubra	Privet, in variety	Hamamelis
Berberis Thunbergii	Viburnum, in variety	Lycium barbarum
Prickly Ash	Flowering Currant	Lonicera Halliana

SHRUBS WITH BRIGHT-COLORED BARK IN WINTER

Cornus alba	Cornus stolonifera	Kerria Japonica
" elegantissima	" sanguinea	Salix aurea

SHRUBS WITH COLORED FOLIAGE

Berberis purpurea	Corylus atropurpurea	Spiraea aurea
Cornus elegantissima	Weigelia Sieboldii	Prunus Pissardi
Sambucus aurea	Hibiscus variegata	Philadelphus aurea

SHRUBS FOR TRIMMERS

Low shrubs of prostrate habit, for trimming under the large shrubs.		
Berberis Thunbergii	Adam's Needle	
Symphoricarpos alba	Deutzia gracilis	
" rubra	" Lemoinei	

SHRUBS FOR HEDGES

Spiraea Bumaldi	Berberis vulgaris	Privet Regelianum
" Ant. Waterer	" purpurea	Syringa, in variety
" Van Houttei	Buckthorn	Philadelphus, in var.
Berberis Thunbergii	Privet, in variety	Russian Mulberry

SHRUBS FOR RETAINING EMBANKMENTS AND FOR GROUND-COVER IN STONY PLACES

Matrimony Vine	Sumac, in variety	Panicled Dogwood
Rosa humilis	Willow, in variety	Bittersweet

SHRUBS WITH BERRIES IN FALL AND WINTER

Snowberry	Lonicera Tartarica	Bittersweet
Indian Currant	Rosa rugosa	Sambucus
Rhodotypus	Prickly Ash	Sumac
Berberis, in variety	Matrimony Vine	Woodbine

VINES, SHOWING PERIOD OF BLOOM

June

Wistaria	Bittersweet	Honeysuckle, in var.
Dutchman's Pipe	Akebia	Matrimony Vine

July and August

Actinidia	Trumpet Vine	Clematis, in variety
-----------	--------------	----------------------

PERENNIAL FLOWERS

TALL-GROWING, FOR BACKGROUNDS

Hollyhocks	Rudbeckia	Bocconia
Helianthus	Boltonia	Erianthus Ravenna

MEDIUM HEIGHT

Phlox	Hibiscus	Tritoma
Pyrethrum	Delphinium	Pæonies
Coreopsis	Eulalia	Day Lily
Gaillardia	Platycodon	Iris
Digitalis	Chrysanthemum	Dicentra

LOW-GROWING, FOR BORDERS

Shasta Daisy	Campanula	Phlox subulata
Hardy Pinks	Iberis	Dianthus
Aquilegia	Stokesia	Anemone

Descriptive Department and Pictorial Section

OF

GREENING'S PICTORIAL SYSTEM OF LANDSCAPE GARDENING

UP to this point I have endeavored by text and illustration to make plain the principles of landscape gardening, and the appreciative student is now ready to enter upon the study of the best examples of landscape compositions as portrayed by pictorial art.

There are some things beyond the power of language to express. Words are but the shucks of sound. After all, language is a very imperfect instrument to convey thought, and when the poor power of words can go no further, pictures tell our inmost musings. Pictures are the soul of sense.

There are beauties and emotions that transcend all speech. A beautiful garden is one of these. It makes a perfect picture. In the presence of such a picture we can but stand bedumbed with awe, and in the hush and silence feel the thrill that speech hath never told.

From now on the student has but to sit and look and let his brooding soul hatch out his thoughts. The pictures are arranged like a moving panorama, and every style of garden in various stages of development is presented for consideration.

In this respect the present work is unique. To teach gardening in the language of pictures has never been attempted before, and no writer on the subject of landscape art has collected such a large number of beautiful photographs for a similar purpose. Each one is true to life and reflects with absolute fidelity "the face and form of nature's perfect self."

Whilst the book will be of great assistance to professional landscape gardeners and building architects, it is designed primarily for the amateur who can learn how to beautify his own grounds and weave his personality into every feature of his garden. The study of pictures will help him develop his analytic faculty, after which the synthetic sense of construction will come quickly into play, and the making of gardens will become a supreme delight.

As a further aid to the student I have added my own description of each subject, but I recommend that he make his own analy-



Plate 50

A FLOWERY GLEN—VERY PICTURESQUE

A rolling country offers great diversity of scenery and is the delight of the landscape artist. The scene shows a house built on a hillside. The top of the hill is covered with Maple-trees and the slope is naturalized with flowers. On the lower level is the yard proper, which is kept open for use and beauty, and the framework of shrubs around it consists of *Rosa Rugosa*, *Spiræa*, *Weigelia*, *Philadelphus*, *Lilac* and *Deutzia*. The tree in the left center field is a Lombardy Poplar and the one next to it is a *Magnolia*. The vines on the house are Hall's Honeysuckle and American Woodbine. The little specimen evergreens are *Thuja Occidentalis*, var. *Pyramidalis*. One urn contains a Century Plant, and the others are filled with *Geraniums*.

sis and refer to the text merely as an incidental aid. In every case I have named with great particularity of detail all the trees and shrubs that are used in each picture, and indicated its special beauties or faults of construction, thus enabling the reader who has no time to pursue the study in detail to quickly understand the salient points of garden composition. And, if after reading this book there still remain any obstacles to overcome, the reader is asked to write me freely for any further information he may desire. I want him to write me anyhow. If I have helped him, it is pleasant to be told; if I have failed to do so, his generous suggestions will teach me how.

And in conclusion, I ask all readers who have beautiful garden scenes, especially those readers who have had unusual successes in their garden work, to send me some good views suitable for reproduction. All that are available will be gladly used in a future edition of this book and proper acknowledgments will be made.



Plate 51. A Privet Arch

A PRIVET ARCH

Live gateways and arches are very ornamental, and all kinds of efforts are made to form these of vines and rose-bushes supported on wire frames. Here is one made of California Privet, the same plant that forms the hedge. It looks as if it were chiseled out of a wall of green.

The application of this idea is common in Europe, and such hedges and fantastic entrances are numerous in London, especially on the road between the city and the Kew Gardens. All the gardens are thus enclosed, and the traveler is impressed with the quiet seclusion of the inhabitants. Every garden of any consequence is enclosed with hedges; and this refers not only to the flower gardens but to the vegetable and fruit gardens as well. Hedges always look well provided they are well kept, and the English gardeners certainly know how to take care of hedges. Such hedges are especially recommended in America, where there is much neglected, vacant property overgrown with weeds



Plate 52. An Exclusive Residence Street

AN EXCLUSIVE RESIDENCE STREET

This gateway is the entrance to an exclusive residence street. It is a dedicated street and belongs to the public, but the form is so unusual that it looks more like the entrance to a gentleman's estate than an avenue for public travel. The street is just wide enough for a driveway on each side of an esplanade in the middle. This esplanade is filled with a heavy growth of dwarf shrubs, chiefly *Berberis Thunbergii*, Snowberry, Indian Currant, *Viburnum* and *Spiraea*. The entrance itself is severely architectural, the only floral decoration being an urn on each post. The trees are Maples, headed up to a good height for avenue planting. This idea is commended to those who lay out what, in the parlance of the trade, is known as "Quality subdivisions." In such cases, too, there is much gain in having the planting designed by one man, as this insures unity of composition.

INFORMAL GARDEN WITH LARGE OPEN LAWN

An informal garden of great beauty. The contrast of open lawn and heavy border planting is most agreeable. The shrubs near the house are *Spiraea Van Houttei*, those bordering the lawn are of many varieties intermixed. The large tree in front of the house is an Elm.

This is one of the finest examples of artistic garden composition in this book. The reader will understand it at a glance and see that the idea of an open lawn treatment with a heavy border planting makes a pleasing picture. There is no limit to the application of this idea, the permutations being as numerous as the sands of the sea. The house is a sort of cross between the Mission and Moorish styles of architecture, and the shrubs at its base are shaped by the Greening System of summer pruning to make them conform with its outlines. This idea of pruning originated with myself, and whilst the innovation was regarded with suspicion at first, it is now followed by a number of gardeners, some of whom are not quite generous enough to give credit for the idea. But no matter—the public gets the benefit anyhow.



Plate 53. Informal Garden with Large Open Lawn

DEUTZIA GRACILIS FOR A NARROW SPACE

On many properties there is a narrow space of ground between the sidewalk and the foundation wall which is hard to treat. It is impossible to grow grass satisfactorily and if it were it is unmanageable with a mower. The best thing to do is to plant the space with *Deutzia Gracilis*, which is a low, dense-growing shrub that makes a fine ground-cover and is very beautiful in June when covered with a mass of snow-white blossoms. It is a shrub that does well in the sun or shade, and can be used on any side of a building. *Berberis Thunbergii* is also adapted for this purpose, but the border must be closely sheared, as it is thorny and liable to catch in a lady's dress and pull a thread, a happenstance that ruffles both the garment and the wearer thereof.

If the space is at least five feet in width taller shrubs may be used, say *Philadelphus Aurea*, the erect-growing *Spiræas* like *Billardi* and *Sorbifolia*, as well as the Privets, in variety. On the sunny side of the house, if the ground is fairly rich, the Baby Rambler makes a good bedding plant for this purpose.



Plate 54. Shrubs for a Narrow Space



Plate 55. Greening's Horticultural Gardens

GREENING'S HORTICULTURAL GARDENS

These gardens present a perfect dream of beauty and elegance. They are the admiration of the most fastidious visitor, the ideal of the beautiful in tree, lawn, shrub, hedge, etc. The artistic arrangement of grounds and buildings, beautiful parks, handsome avenues, fine driveways and walks, our excellent system of waterworks, and numerous other things to be seen at the country home of the author, give an impressive example of what human energy and ambition may accomplish.

These gardens were converted from an ugly-looking, deep ravine which required thousands of loads of soil to adjust the grade. The composition is formal and consists of hardy varieties. The walks are of crushed trap-rock, rolled hard as cement, and the chief care is to keep the edges clean.



Plate 56. An Informal Approach

AN INFORMAL APPROACH

This is a modification of an informal approach, the lines of the walk being carefully edged, but no formality is attempted in the floral border, which is a tangled growth of foliage in "magnificent disorder." The background is a trellis covered with Crimson Rambler Roses, whilst the ground-cover consists of low-growing perennials, Achillea, Anemone, Veronica, Rupestris, Lychnis, Coronaria, Aquilegia, Gaillardia, Shasta Daisy, Pæonies and Tritoma. This walk leads from the side of the residence to the natural garden by the river bank.

The creation of such a border is simplicity itself. It should not be forgotten that flowering plants have a great deal of individual beauty irrespective of arrangement in an informal planting, and there is no excuse for anyone being without an abundance of flowers. I will even go further and say that poverty is no bar—for love will find a way. The love of flowers is more than a sentiment: it is an enthralling passion. Even those who cannot afford to buy plants can make a very respectable collection from the woods, the fields, the roadsides. Do you know the beauty of the Goldenrod? Do you sense the charm of the Milkweed or the Bull-thistle?

A DOUBLE REVERSE CURVE

This park scene is on rolling ground, which fact explains the double-reverse in the driveway. It follows a natural ravine and winds around the hillocks to avoid abrupt grades. This satisfies our sense of propriety in such things, and even adds a peculiar charm to the landscape. On level ground only one reverse would be permissible, for curves do not please when they are obviously put in for effect.

The tall trees in this scene are Maples and Elms, the shrubs in white bloom are *Spiraea Van Houttei* and the others are *Rosa Rugosa*, *Berberis Vulgaris* and *Thunbergii*, *Philadelphus*, *Syringa*, *Deutzia* and *Viburnum*.

Few people realize the beauty of the *Rosa Rugosa* as a subject for shrubbery borders in large masses. The foliage is abundant, crinkled, and of a glossy green; and above all it is practically immune from the attacks of insects.



Plate 57. A Double Reverse Curve

ENTRANCE TO A WOODED COPSE

On each side of the entrance to this wooded copse is a border of hardy perennial flowers and ornamental grasses, which serves as a foil for the lawn and sharply defines the outline. The border consists of *Yucca*, *Iris*, *Phlox*, *Delphinium*, *Shasta Daisy*, *Pyrethrum*, *Boltonia* and *Coreopsis*. They give a great variety of color and succession of bloom.

In this picture we want to show the beauty of natural and cultivated effects as practiced by the Greening Pictorial System. Any cluster of trees and undergrowth may be treated in this manner, irrespective of the size of the estate; nor does it make any difference how small or large the trees are. In order to fill out the ground-cover and make it look more mature in finish many woody shrubs are used, care being taken to select kinds that do well in the shade. There is a way of treating such natural scenes to intensify their sylvan appearance, and the art must be practiced in accordance with the science of silviculture.

Many of the large English estates are treated in this way, and as we leave the lawn area we plunge at once into a thick woods filled with birds and squirrels and, in some cases, with antlered game. The lawns are mowed with horse-power machines and look somewhat like an American meadow in May. They are green enough but quite coarse.



Plate 58. Entrance to a Wooded Copse



Plate 59. A City Back Yard

A CITY BACK YARD

It has come about that a back yard is the most valuable part of the city lot; for that is truly one's own. The front yard belongs more or less to the public; at any rate, common courtesy allows it, for it is usually given open treatment. But the back yard is different: by planting a bit of woodland it becomes a sacred place, that none but friends dare enter—a little family sanctuary beyond the reach of unbidden guest.

The above picture shows a pergola leading from the back of the house to the formal garden at the extreme rear. And it shows an open lawn on one side with a settee under the apple-tree which fits nicely in a large yard, giving it an "old homestead" sort of look which is very pleasing. Next to the pergola and on the side nearest the house is a composite group of shrubs that give a succession of bloom; and in front of them is a border of perennial flowers.

The vines on the pergola are *Ampelopsis Quinquefolia*, *Lonicera Halliana*, *Lycium Barbarum* and *Clematis Paniculata*.



Plate 60. Another View of the Same Pergola

ANOTHER VIEW OF THE SAME PERGOLA

This is another view of the same pergola taken at the same hour, and showing the same shadow effects; also showing the shrubs on the other side, which are *Spiræa Van Houttei*, *Berberis*, *Syringa*, *Philadelphus* and *Deutzia Gracilis*. The trees in the boxes are *Thuja Lutea*, a golden-leaved evergreen of pyramidal form.

The construction of this pergola is accomplished at a very small expense. It can be easily put up by a local carpenter. The foundation is made of concrete and rises one foot above the ground. The columns are 4 x 4, veneered with one-inch boards, dressed. The girders are 2 x 8 and 12 feet long, placed double, with braces between carefully packed. The trestle-work is made of 2 x 6 stuff with molded ends, whilst over all is a lattice-work of three-inch strips. The vines are planted near the columns and trained to form a canopy. Between the columns, a Privet hedge or some formal shrubs should be planted.

A VINE-MADE HEDGE

This hedge is in the city of Ann Arbor, Michigan, and is made of *Lycium Barbarum*, or Chinese Matrimony Vine. Intelligent pruning has kept it in compact form, and it makes a solid screen without support of any kind, showing how plants respond to intelligent direction.

To grow a hedge of this variety, very frequent pruning during the growing season is necessary, on account of its habit of throwing out strong drooping shoots. This view presents another idea of what can be accomplished in hedge growing, and it is intended largely to call special attention to a plant that will thrive under the hardest conditions; in fact, it will grow where few other plants will.



Plate 61. A Vine-Made Hedge

LYCIUM BARBARUM (CHINESE MATRIMONY VINE)

The Chinese Matrimony Vine is used here as an overhang to drape a stone wall. It is a very hardy and vigorous climbing and trailing shrub. Valuable for exposed places and as a ground-cover for stony hillsides. Makes an effective screen for porches and an excellent mask for unsightly objects. Also makes a fine hedge when properly pruned, and thrives in the very poorest of soils. Its flowers are blue and small, resembling Forget-me-nots. It is literally covered with small red berries in the fall, making it very attractive.

It may not have the best appearance as compared with the showy Clematis or Honeysuckle, but it is nevertheless a most valuable shrub to be used under severe conditions, and I am glad to be able to recommend a vine that accommodates itself to such a wide range of soil and climate. It will grow even in light sand and in shady places, which is the hardest combination for a gardener to overcome. It is at home in the warm climate of Texas and in the extreme cold of Northern Minnesota.



Plate 62. *Lycium Barbarum* (Chinese Matrimony Vine)



Plate 63. A Colonial Garden

A COLONIAL GARDEN

This is an old-fashioned garden of a type that was common in the old Colonial days before Liberty Bell sent its peal of freedom around the world. Such gardens are still common among the gentlefolk of Virginia. It is, in short, a southern garden translated to northern lands. The beds are all curvilinear and filled to overflowing with a tropical luxuriance of flowers. The favorites are the Larkspur (the Delphinium of our English cousins), Shasta Daisy, Dwarf Phlox, Monardia, Gypsophila (commonly called Baby's Breath), Lilies, Michaelmas Daisy, Sweet William and Stokesia. The latter is the German National Flower.

This garden displays some artistic arrangement, and yet the form is merely a secondary matter. The primary intention is to secure large quantities of flowers for cutting. Frequently the vegetable garden can be utilized as an annex to the flower garden and yield many flowers in some corner not occupied.



Plate 64. An Elevated Egyptian Garden

AN ELEVATED EGYPTIAN GARDEN

This is an elevated garden of Egyptian style. In this instance the mansion is on elevated ground and the court or main yard is on a much lower level, with a pronounced inclination toward the river bank four hundred feet away. It gives a savor of piquancy to the site to build an elevated garden at its base; and this garden with its architectural embellishments is really an outdoor room with tiled mosaic floors, and is a part of the house proper. The shrubs in white bloom are *Spiraea Van Houttei* which fit admirably in many locations. The compact shrubs beyond are *Golden Syringa*. The pergola is of Tuscan design and overlooks the garden.

The huge urn on the right is designed to hold drooping vines. Bay trees or evergreens in tubs would be appropriate additions to the entrance-way. Connected with this kind of a garden there is always a large portion devoted to roses and, frequently, a professional rosarian is employed. The space is all utilized with the most intensive culture possible.

A GENTLEMAN'S ESTATE

Here is a view on a gentleman's estate. It is observed at once that there is perfect privacy and that intrusion is almost impossible. The boundary planting is tall, and consists largely of Flowering Crab, Wild Cherries and Mulberries to attract the birds. In front of these are Bush Honeysuckles and High-bush Cranberries. The border consists of very low shrubs, which give an easy transition from the lawn to the taller growth at the rear. In the far background is a grove of Evergreens, which gives a lively touch of color to the scene. This park is a good example of the Greening Pictorial System of Gardening. Observe the large open lawn and the fine contrast of the heavy border planting in irregular lines; also the easy gradation from low shrubs and showy perennials at the edge to the tall tree growth at the rear.



Plate 65. A Gentleman's Estate.

SPIRÆA VAN HOUTTEI FOR HOUSE BANKING

The *Spiræa Van Houttei* looks natural and graceful in many locations. It is very effective as used here at the entrance to a mansion on account of its willowy, drooping habit, and enforces the lesson that plants have character and expression in their pose. A shrub with straight, stiff branches, like the *Althea*, would have the effect of a sentinel at "attention," and consequently repel by its sternness of aspect. On the contrary the *Spiræa Van Houttei* as used here has a cheery and inviting mien that is most charming.

This *Spiræa* can be used for more distinct purposes than any other shrub in the whole catalogue of floriculture. It makes a very attractive hedge, as it yields to pruning almost as naturally as the more formal hedge plants—the *Privets*, for instance. Elsewhere in this book are shown banks of the *Spiræa Van Houttei* which have been kept short by pruning for formal effects, and the results have been most satisfactory in this way. The only objection to pruning during the summer months is that it destroys some of the bloom. There is a compensating result, however, when formal effects are in keeping with the surroundings. Where a colored border banking is desired, the *Purple Barberry* and *Golden Syringa* are responsive to the same treatment and the combination is very beautiful.

Plate 66. *Spiræa Van Houttei* for House Banking



Plate 67. A Back-yard Beauty Spot



Plate 68. A Garden Cozy Corner

A BACK-YARD BEAUTY SPOT

The vine on the barn is a Chinese Matrimony Vine; the large-leaved tree in front of it is a Catalpa Bungei; the small round-headed evergreens are Thuya Globosa; the tree in the left background is an apple-tree; the perennial flowers are Phlox, Delphinium, Coreopsis, Pyrethrum and Boltonia. There is a fountain in the middle surmounted by a little Cupid, and the four statuettes around it are cousins of Cupid. A hedge of low grasses surrounds the fountain. Crimson Rambler Tree-Roses to left and right in bloom.

The peculiar mood of the owner is indicated by the wide clapboards on the house as well as by his little family of statuettes. The garden itself looks a little crowded, but that was his mood also. The fountain with its gurgling water is a very pretty feature and the whole garden is full of animation. Notwithstanding all its oddities of composition this is a very pretty garden.

A GARDEN COZY CORNER

A Privet Hedge properly pruned, Hall's Honeysuckle well trained, a pergola covered with climbing vines and a flower garden are the interesting features of this beautiful picture. A good example of the Greening method of landscape gardening.

The tone of this garden is in direct contrast to the one shown above. It is mellow, quiet and reposeful. The pergola is attached directly to the conservatory part of the house and serves as a covered walk leading to the flower garden. Its construction is in very simple style and not expensive. The hedge is a very pretty feature and shows great care in training it. Its beautiful density from the ground up was produced by close pruning at the time of planting and during the first three years of growth. The one jarring note is the use of rustic seats at such a place. A plain board painted green without any attempt at rusticity would have been better.

A WATER SCENE

Water scenery is always pleasing, whether seen in the angry mood of a torrent or in the shimmering sheen of a quiet pool. In this instance the surface is so glassy that all there is above it of sky and cloud is clearly mirrored. The reflection of the trees is remarkable for its perfect fidelity to nature. It was amid such scenes of quiet introspection that Wordsworth, Coleridge and Southey, who have become known to us as the "Lake Poets," wrought in rhyme their rhapsodies of song. The paragraph on gardening at the beginning of this book is by Wordsworth.

The trees in the background are Oak and Maple; in front of them is a variety of Snowball known in some localities as Highbush Cranberry, and in others by its beautiful Indian name of Pembina. The plants on the water's edge are Iris, Hibiscus, and Lobelia Cardinalis.



Plate 69. A Water Scene

A NEGLECTED APPROACH

This is a neglected entrance-way that otherwise would be very beautiful. There should be a border of sod eighteen inches wide next to the walk, and lower shrubs should have been used in the foreground. The tree on the right border is a sycamore that will in time kill off all the shrubs near it. The white-flowering shrub at its base is a Bridal Wreath Spiræa, and it should be with its companion further back. Altogether it shows very poor taste in arrangement, and this picture is introduced as an object lesson on "How not to do it."

This subject is an example of what frequently happens when people without garden experience do their own planning and planting, without a thorough study of the situation; and it is the design of this book to help owners avoid mistakes and overcome obstacles. In gardening, as in other lines of art, the creative faculty must be cultivated by meditation on the work in hand, and on large landscape propositions it pays to engage a professional "meditator" on the subject of landscape construction. A properly constructed garden lasts a lifetime, and it is false economy to plant a disheveled mass of shrubs on a crazy-quilt sort of a plan, when a similar or smaller investment at one time will secure an artistic garden picture.



Plate 70. A Neglected Approach



Plate 71. A Good Grape-Arbor

A GOOD GRAPE-ARBOR

This is a mixture of good and bad gardening. The arbor is in good taste and its covering of wild grapes is a nice feature. The tree on the left is a Hard Maple and the one on the right near the arbor is a Silver Maple. The grove in the background consists of Beech and Maple.

The objectionable part is the way the walks are bordered with brick, which is a very far-fetched and unnatural finish for a garden of this sort. It is all right to border the walks of a Dutch garden in some such way as this, for in that case the sharp demarcation between the walks and flower-beds can be outlined only with a curb of some kind; but in a natural garden it is different, as the lawn sufficiently defines the walks.



Plate 72. A Rustic Arbor

A RUSTIC ARBOR

An arbor made of natural wood over a flower-bordered walk. The vines on the arbor are Matrimony Vine, Trumpet Vine and the Dorothy Perkins Climbing Rose. The border consists of Creeping Phlox, Achillea, Hardy Candytuft and Sweet William.

This rustic arbor appeals to most people, as the tone is natural; and I know a man who has what may be called the "artistic grouch," who goes into raptures over such a scene. When he talks about it a sort of ecstatic glow overspreads his features and, on one occasion, he made me feel his shoulder-blades to convince me that he was sprouting wings.

Such an arbor is at its best when covered with wild grape-vines, their delicious odor of bloom and fruit adding a great deal to the enjoyment of the scene. Structures of this class are very appropriate on country estates or near the summer home of a city man. They fit in almost anywhere—in a cozy retreat, over the well-head or, if you will, over the garden gate where poetry is spoken without words.

GROWS WHERE GRASS WILL NOT

For covering mounds or rockeries the *Ægopodium Podagraria Variegatum*, otherwise known as Variegated Goutweed, is very suitable, especially in dry places, as it will grow where grass will not. It makes a dense carpet of mingled green and white foliage, and flowers in white umbels in June. Also good for edging.

Other good perennial plants suitable for a ground-cover are, *Anemone*, *Phlox subulata*, *Veronica*, *Rupestris*, *Sedum Sexangulare* and *Cerastium tomentosum*. A number of vines are also suitable, especially *Hedera*, known as the English Ivy, but this will require some protection in the North. In shady places the Japan Honeysuckle makes a good mat. In sunny places, the wild roses, like *Rosa Lucida* and *Rosa Carolina*, make very pretty effects. Under trees, where the shade is too dense to grow grass, the Lily-of-the-Valley or the Myrtle may be used.



Plate 73. Grows where Grass will not.

THUYA OCCIDENTALIS HEDGE (American Arbor Vitæ)

This is another method of forming hedges, with the top billowed or undulated. To obtain results shown in the illustration, the best plant to use is *Thuya Occidentalis* in two parallel rows, two feet apart and 18 inches apart in the rows. If Privet is used, three parallel rows are required, one foot apart each way.

The American Arbor Vitæ grows faster than any other Evergreen hedge for the first three or four years, after which its growth diminishes from year to year. It is very desirable on this account, as immediate effects are obtained and in after-years the hedge can be controlled more easily than any other evergreen hedge. It can be pruned very close to each previous year's pruning without showing any stubby effect, something which is not the case with a Spruce hedge. It has a tendency to fill up nicely, and if planted two feet high it is very pretty right from the start, and it eventually makes our best hedge either for ornament or a windbreak.



Plate 74. Thuya Occidentalis Hedge (American Arbor Vitæ)



Plate 75. Shutting off Unsightly Vacant Lots

SHUTTING OFF UNSIGHTLY VACANT LOTS

This yard is next to an alley in which there are telephone and other poles which make it very unsightly. To shut off the view, trees and half standard shrubs were used and the effect is magical. The trees are *Catalpa Speciosa*, Wier's Cut-Leaved Maple, *Salisburia*, Russian Mulberry and *Prunus Pissardi* planted ten feet apart, and the space between is filled with Tartarian Honeysuckle and *Viburnum*. The front planting consists of *Deutzia Gracilis* and *Berberis Thunbergii*.

In the Greening Pictorial System of Landscape Gardening as much attention is paid to shutting out objectionable views as to creating new views in the yard proper; and it is just as important to appropriate distant views, such as a glimpse of water in the offscap or a patch of sky, so that the owner has but to stretch forth his hand and caress the clouds.



Plate 76. Back-Yard Gardening

BACK-YARD GARDENING

This is a good example of an informal back-yard garden. Observe the open lawn and the undulating contour of the shrubbery border to produce a natural effect. The shrubs used are Lilacs, *Spiræas*, Syringas, Snowberries, Weigelas, Dogwoods, Witch-hazel, and Tartarian Honeysuckle. The trees are Paul's Double Flowering Thorn, Mountain Ash, Maple and Elm.

This border planting shuts out a very unpleasant view near the barnyard, which is in fact the hog-lot; but no one would suspect their presence by either smell or sound, so dense is the planting and so numerous the flowers. There is no reason why farmers should not have attractive surroundings when a little forethought and a small outlay will give them a private park such as city people pay large sums of money to obtain. It is just as easy and much more convenient and artistic to have the hog-lot near the corn-crib instead of near the house, and, as for Mr. Hog, not even the Chicago packers can find music either in his grunt or squeal.

BACKGROUND OF TREES

On large properties it is sometimes advisable to make a background of trees and an undergrowth of shrubs, especially when it is necessary to shut off some objectionable view. In this landscape Wier's Cut-Leaved Maple, Catalpa Speciosa, Salisburia and Tulip-trees were used for this purpose, and the undergrowth consists of Berberis, Viburnum, Dogwood, Prickly Ash, Indian Currant and Snowberry. The tree in the center field is a Wier's Cut-Leaved Maple. The shrubs near the house are Spiræa Van Houttei.

The chief attraction of this backyard landscape is the open lawn treatment, which is greatly admired by people who have taste for pictorial compositions. The massive border planting gives an impressive effect, whilst the broken sky-line and undulated borders, giving partial concealment of some portions of the yard, make the scene very suggestive. This garden is a splendid illustration of the Greening Pictorial System.



Plate 77. Background of Trees

A CHARMING PARK VIEW ILLUSTRATING THE GREENING PICTORIAL SYSTEM

The disappearing walk has a peculiar charm in the fact that it is suggestive of other garden beauties beyond. As we follow it the mind is kept in a state of expectancy and pleased with the succession of surprises. The portion before us shows a colony of Thuya Occidentalis, Thuya Hoveyii and Picea Excelsa, all evergreens of distinctive charm. The large trees are Maple. The group of shrubs at the bend of the walk is a happy family of Berberis Thunbergii, Philadelphus Aurea, Spiræa Reevesii and Kerria. The trees beyond it are Pines and Cedars, which deepen the perspective and add variety to the sky-line.

This picture shows some very artistic effects in pruning to shapely forms a number of specimens in the foreground. The subjects that are globular naturally grow that way but shearing has intensified the effects, which, in this case, are very pleasing as they limn them sharply and make them stand in relief from the tall-growing background. The whole planting is designed to conceal a very unsightly view, but advantage is taken of the fact to create a picture at that spot, and it is made doubly beautiful by the curve in the walk.



Plate 78. A Charming Park View Illustrating The Greening Pictorial System



Plate 79. Scene in a Cemetery at New Orleans

SCENE IN A CEMETERY AT NEW ORLEANS

The main feature of this picture is the Live Oak in the right foreground. It is a beautiful, sturdy subject, without which a southern landscape is not complete. This tree is not recommended for the North, the picture being introduced merely to show the wide range of the Oak family and the particular representative of it which is generally cultivated in the South; and also because this type of tree is particularly interesting to me. On account of the peculiar nature of my business I usually take my vacation in the winter, hunting and fishing in Louisiana and Texas and visiting parks and cemeteries of the Southland for mental and spiritual profit; and at each recurring visit I find a new charm in the picturesque pose of the Live Oak.

And this leads me to remark that I have made a thorough study of landscape construction in the South, and of the material used; so that clients in that section will receive the full benefit of my practical garden experience the same as my Northern friends.



Plate 80. A Glimpse of the Southland — Park Scene in New Orleans

A GLIMPSE OF THE SOUTHLAND
PARK SCENE IN NEW ORLEANS

This is a park scene with a very wide driveway to accommodate the great amount of travel there is on special occasions. This is what makes park building appear somewhat bizarre and grotesque to the amateur gardener, and where his natural sense of proportion will lead him astray; for it requires a peculiar, cultivated sense to build a park. Where the normal travel requires a ten-foot driveway, there are special occasions that require thirty to fifty feet.

The picture shows a horse drinking-fountain in the middle of the driveway, and a row of settees on the river-bank in the background. The large trees are Elms and Maples. A Century Plant in bloom, a group of Hydrangeas, a bed of Baby Rambler Roses and a Kosteriana Blue Spruce finish the shrubbery detail.

The roadway is made of macadam and kept in good condition by constant attention. Cavities are filled as soon as made and it is kept free of debris. Such a road will last a lifetime.

A COLONIAL GARDEN

This style of garden was common in colonial days when our artistic and literary ideals were English. In those days of our callow national youth, Young and Pollock and Tupper were regarded as great poets, and the mechanical versification of Pope sounded like real poetry. We had not yet evolved Walt Whitman and the naturo-idealistic school of writers of which he is the typical representative; nor even to this day have we evolved ourselves to the point of appreciating Whitman.

In this garden the beds are hedged with Boxwood and each contains a family of plants. In one of them is a tea-house curtained with vines and screened with a high hedge. The grounds at Mt. Vernon were laid out in this fashion, Washington was a very rich man for his time, and being a landed aristocrat as well as aristocratic in temperament and training he naturally developed an estate patterned after the English models, as were all the best gardens in Virginia and the Carolinas at that period. Some of them are still in a good state of preservation.



Plate 81. A Colonial Garden

A DISAPPEARING WALK IN A VALLEY

The charm of a disappearing walk lies in its suggestiveness. It gives a garden a sort of reserved power, and we feel that the view before us is only a foretaste of many hidden beauties beyond. The shrubbery detail at the curve serves as a masking bed to hide but only half conceal certain garden features that are in reserve. After all, gardens are a great deal like people in the way they impress us. It is the reserved power and latent potentialities in men that we admire. The moment we learn a man's limitations our interest in that man's personality is lost. And so a garden with no suggestion or hint of reserved power is absolutely without interest.

The beautiful setting in this picture is made chiefly of perennials—Phlox, Pæonies, Iris, Shasta Daisies, Pyrethrum, and Boltonia. The shrubs are Spiræas, Berberis, Viburnum, Rosa Rugosa, and Baby Rambler Roses. The Rosa Rugosa is a Japanese variety of roses with large, clean, crinkled leaves, and the blossoms are followed by huge hips of glossy red.



Plate 82. A Disappearing Walk in a Valley



Plate 83. Scene in a Rolling Country

SCENE IN A ROLLING COUNTRY

This scene is in a rolling country, the heavy planting on the right being a hillside dropping to a valley in the middle ground, whilst back of the hill is a creek. The slope from the crest of the hill to the water's edge is very precipitous, and to facilitate travel a very simple flight of stone steps is used, a broad landing being placed about halfway up, where a wide suture gives room for a summer-house.

The valley itself winds in a disappearing curve that gives a very charming vista. The borders are planted very heavily with shrubs and a few hardy perennials, prominent in the foreground being *Hemerocallis flava*. On the left is a bank of *Spiraea Van Houttei* and a *Wier's Cut-Leaved Maple*. The trees in the background are Oaks. This is one of the prettiest pictures in this book. The scene possesses rare picturesque beauty and the treatment has enhanced the effect. Note the open lawn treatment.



Plate 84. Front Yard All Planted

FRONT YARD ALL PLANTED

An Irish gardener, in describing a yard to me, explained that the front lawn was all in the back. The above picture illustrates such a place. It is a large house on a small city property and the front lawn is so ridiculously small that it is an evident disproportion. There must be some planting anyway to screen the porte-cochère, why not plant the whole of that small space and make the house look like a little woody retreat? It was done accordingly, and the treatment found very effective. The shrubs used are *Viburnum*, *Barberry*, *Dogwood*, *Spiraea* and *Weigelia*. The trees are *Locust* and *Ailantus*, the latter variously called Chinese Sumac, Celestial Tree and Tree of Heaven. It is very fast growing and thrives under the hardest conditions—even in factory districts, where the soot and smoke and gas kill off all other trees, the *Ailantus* does well. The pistillate trees exhale a rather disagreeable odor and, when planted near the house, it is better to use the male trees.

A BEAUTIFUL PARK SCENE

This park scene consists of an artificial lake in which the neighboring woods are softly mirrored; a beautiful system of walks and drives, just ample for the needs of travel; and a forest of evergreens and other trees that gives a sylvan touch to the whole scene. All the lines meet in a kind of voluptuous content, and over all lies the easy abandon of a happy dream. The evergreens are Pines and Cedars. The deciduous trees are Ash and Maple. The shrubs are Dogwood, Witch-Hazel, Sambucus, Sumac, Prickly Ash and Carolina Roses.

Note the pleasing curve of the driveway and the deep, beautiful vista that it opens up.

This is the same park scene which is pictured in colors in my dedication on page 5. I have used this landscape view in some of my advertisements and probably more copies of it have been distributed than of any other one similar picture, over 1,000,000 copies having been circulated at my expense. The place of observation is at an elevated spot from which the ground slopes with a very pronounced declivity, the lake being at the natural water-table.



Plate S5. A Beautiful Park Scene

EVERGREENS FOR BORDER PLANTING

A colony of evergreens to separate the front court from the rear. It cannot be too strongly impressed on the mind that a garden means privacy. It is, in fact, an outdoor parlor, to which the family should have access with the freedom of home life. A yard open to public view, in which the owners are always under the stress of dress parade, under the gaze of every passer-by, is simply not a garden at all. The first requisite of a garden is privacy. This is a grove of Norway Spruce, Pines and Firs.

In such a garden a man can lounge or roam freely, sans peur et sans reproche; also sans coat and sans chapeau. And the ladies! God bless 'em! It is none of my business what they don't wear. But this I know: they can leave their sheath gowns at home and enjoy the freedom of the outdoor air in their sheath Mother Hubbards.



Plate S6. Evergreens for Border Planting

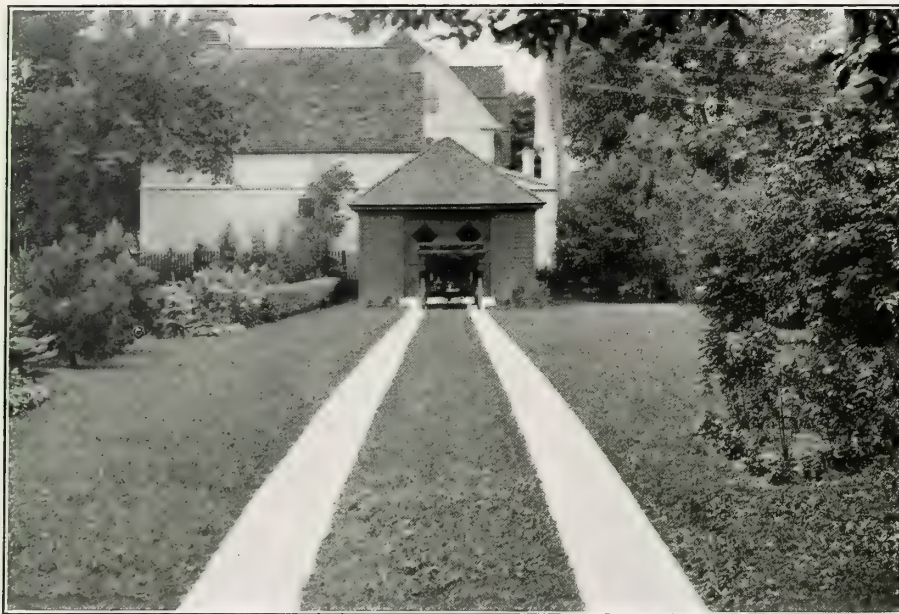


Plate 87. A New Idea for Automobile Entrance

A NEW IDEA FOR AUTOMOBILE ENTRANCE

The general use of the automobile and the great weight of this kind of vehicle require a very substantial entrance-way, and cement has come into general use for this purpose. At the same time it takes no inconsiderable portion of a lawn to build an eight-foot driveway across it, and the expense is very great. The picture illustrates two cement rails eighteen inches wide, which is ample for traction, and which reduces the expense considerably. It also reduces to a minimum the encroachment on the lawn. By laying the tracks level with the sod, and especially when the cement is colored green, it does not mar a lawn very much; nor does it interfere with tennis or other games.

On account of the narrowness of the tread it is generally necessary to make such entrances straight, thereby lessening the danger of running off the track, but in the case of a very deep yard a gentle serpentine sweep can be introduced. Note the hedge and shrubbery detail in the background and on the borders; also the vine on the blank wall of the barn in the distance.



Plate 88. A Natural Theater

A NATURAL THEATER

Such scenes as this are common in England. Of course, from their very nature and their immense size they are found only on large estates, but there are many of them just the same. The pergola on the left leads from the conservatory. In a case of this kind there is usually a similar area in the front, the two making a well-balanced planting covering many acres. Often the carriage entrance is a winding drive through a grove or woods, as in this case, where the forest on the right was built for that very purpose, the peculiar balsamic odor of the trees being agreeable to most people.

This idea is being introduced in our eastern states by men of great wealth who employ gardeners and foresters trained in practical planting. The Greening Landscape Company makes a specialty of forest development, the study of the writer for a great many years having been along those lines. Success in forest planting depends on an intimate knowledge of the habits of trees and their behavior on different soils, as well as in the artistic temperament to create a picture, all of which my staff of gardeners possess in full and rounded measure.

STREET-CURB GARDENING

This is an entirely new idea. The above view adjoins the writer's own garden in the city of Monroe, and since it was planted I have noticed many people pass daily who formerly used other streets on their way to and from the shopping district. To them it is like going through a little park. The improvement was made in a very inexpensive way by planting *Spiræa Van Houttei* six feet apart and trimming them in globular form. Evergreens would accomplish the same purpose, but on account of the running at large of certain domestic animals, their use on the street cannot be recommended. Nor are they entirely safe in a yard that is open to the street, many beautiful specimens having been destroyed by what a doctor would call *aqua caninus*, the same being translated in our vernacular as "dogonit" or words to that effect.

In this case, as I said before, *Spiræa Van Houttei* were used, but the planting was along the rear half of the yard only, and, like most benefits, it is a double benefit; for whilst pedestrians enjoy the park-like scenery, the size of my yard has been greatly increased both in appearance and effect.



Plate 89. Street-Curb Gardening

EVERGREENS AT THE REAR ENTRANCE OF A MANSION

There is a large lawn back of the house, at the extreme end of which there is a pavilion-like arbor, and from this arbor as well as from most points of the lawn the house looked very formal and set. The expedient was used of planting evergreens near the foundation and the effect is very charming. The small globular kinds, like *Thuya Hoveyii* and *Globosa*, are near the edge, and taller ones, like the Spruces, Pines and Firs, are near the house.

Several *Kosteriana* Blue Spruce were planted in the back-ground. Their peculiar steel-blue metallic sheen, contrasting with the various tints of green and yellow, makes a most charming picture. Yellow exercises a peculiar illusion on the sense of sight, its effect being to foreshorten distance; whilst the dark shades of other evergreens make them appear further than they really are. It is, in fact, a stereoscopic effect produced purely by chromatic laws, and I have often been amused at the wonderment of some people who perceived the effect without being able to discern the cause.

Lonicera Halliana, or Hall's Japan Honeysuckle, were planted near the porches and grown over them. The foliage of this vine remains green so long—until the holidays—that it makes a fine combination with the evergreens. Back of this scene and through it is a system of narrow walks leading to the various buildings and to the flower garden on the south side of the residence. The front lawn was planted informally, the center being kept open with the exception of a few trees to soften the high lights, and the borders were planted heavily with trees and shrubs to separate the yard proper from the farm of which it forms a part.



Plate 90. Evergreens at the Rear Entrance of a Mansion



Plate 91. A Poplar Screen

A POPLAR SCREEN

The screen shown in this picture is made of poplar. It is ten feet high and is a perfect screen for the horse-paddock back of the barn. The little trees are planted two feet apart and by frequent heading back are made to grow dense. Another tree frequently used for this purpose is the Russian Mulberry, which has nice, clean, glossy leaves and its fruit is a great attraction to birds. Young trees closely pruned should be used to start a tree hedge.

This kind of a screen is very common in Europe, especially in Germany. The large beer gardens on the outskirts of Berlin are surrounded with such screens or tree hedges, illustrating what can be done with shade trees if properly started at the time of planting. Almost any kind of tree can be used for this purpose if it is cut back and grown in bush form. All kinds of trees can be dwarfed by severe pruning, especially summer pruning, and their nature, in time, becomes permanently changed. The Japanese have performed wonders in this respect by dwarfing the Maple to a very diminutive size, just as their Chinese cousins have dwarfed the feet of their women.



Plate 92. The Hardy Garden

THE HARDY GARDEN

The border of hardy perennial flowers is the most showy portion of a garden, and when established it takes care of itself, coming year after year with the profusion of bloom that we see in the picture. A strip of grass two feet wide separates the driveway from the flower-beds and sharply defines the borders of both. Near the grass are low plants, back of them some of medium growth and in the rear are the tallest of all. See list of perennials arranged according to height in another part of this book. Note beautiful background of trees.

Not all perennials are perfectly hardy in our climate; a number are half hardy and must be treated as annuals in the North. Some of them must be started in hotbeds early in the spring and afterwards transferred to cold frames to tide over the dangerous period, after which they are transplanted in the open. Others, like the Verbena, are self-seeding. I give a list of the best varieties of these half-hardy kinds on page 46.

EXPOSITION GROUNDS

This is a view of grounds in Forest Park, St. Louis, during the Louisiana Exposition. It is not generally known that nursery and floral exhibitors are invited to participate in the work of decorative planting and install their exhibits, long before the manufacturers of shelf goods are assigned their space. Often this work is in progress for two or three years before the gates are formally opened to the public.

The laying out of grounds for a county fair is not a very serious problem; but the laying out of grounds for a World's Fair becomes a gigantic proposition, for the reason that it is international in its scope and all sorts of temperamental moods must be humored. Next to the buildings there is no one feature that attracts as much attention and comment as the decorative planting, and fair commissioners have need of the best talent in landscape construction work. The writer has frequently been called in consultation on the arrangement of large exposition grounds, and knows from experience the kaleidoscopic diversity of artistic tastes; and he also knows that art is such an intangible, fugitive thing that in it lies a subtle spirit of vagabondage, differently idealized by the various races of men. At the same time the great size of fair grounds makes it possible to introduce much variety in composition, depending on the inventive fertility of the designer.



Plate 93. Exposition Grounds

WELL-PLANNED FLOWER GARDEN

Example of a well-planned flower garden showing Pæonies in the foreground and beds of Phlox, Delphinium, Pyrethrum, Shasta Daisy, Boltonia, Columbine, Poppy, Gaillardia and many others. Note the sun-dial in the middle of the garden. The trees in the background are Maples.

Such a garden should not be attempted unless there is a good supply of water to tide over the midsummer drought, for, of course, with such thick planting cultivation is impossible. It is also important to enrich the soil with a good dressing of well-rotted stable manure every spring, hoeing it in carefully with a garden rake before the plants start growing. This may sound like an Irishman's advice, but the fact remains that a rake can be used as a hoe and will not cut the roots. It is surprising how much the mechanical condition of the soil can be improved by the use of stable manure. The decaying fiber known as humus make it porous and retentive of water.



Plate 94. Well-Planned Flower Garden



Plate 95. Side Approach to a Mansion

SIDE APPROACH TO A MANSION

This is a peculiar way of treating an approach. Instead of winding through the lawn, as is the common practice, it is separated from it and made into a distinct garden unit. On one side is a hedge of *Thuja Occidentalis*, trained eight feet high, to give privacy to the real garden which is beyond it. On the other side there is a perennial border that is very attractive, the plants used being *Yucca Filamentosa*, *Iris*, *Plume Poppy*, *Hardy Pampas Grass*, *Boltonia*, *Phlox*, *Delphinium* and many others. A row of small Japanese Maples is at the rear.

The position of the hedge is not in conformity with the best artistic taste. It nearly shuts out the view of the house. Of course, in a country that is subject to cold, raw winds, such a hedge affords a great deal of protection, and I surmise the hedge is there for that purpose more than anything else; still, it should have been kept farther from the walk and more lawn retained. It simply goes to show how an otherwise able man will make mistakes in his gardening if he fails to consult someone who has cultivated a sense of proportion in such work and who understands the proper relation of garden details.



A WELL-BALANCED PLANTING

A back yard with just trees enough for shade, lawn enough to play games, and shrubs enough to frame up the yard with a good massive border of foliage. The trees are Maples, Tulip-Trees and Lindens. The shrubs are *Spiraea* in variety, *Berberis* in variety, *Syringa*, *Philadelphus*, *Weigelia*, *Rosa Rugosa* and *Deutzia*.

The one great fault is that it is open to the street. It is a beautiful spot for the public to look at, but it is not of much use to the owner himself. Unless one has a large estate, in which case there is plenty of room for a hearth-like yard open to the street, it is better to enclose it completely and have the full freedom of its use. The common objection to this in America is that it is an unusual treatment and out of the ordinary. I have heard that a thousand times until my brain is bored with the repetition.

What if it is different? Is it such a great fault to have individuality and be different from the rest? Is not all progress made by people who are different? To follow a fashion that is false is the precious privilege of the punk party, but to accept a new truth with gladness and to perceive the beauty of an artistic concept is the test that tries the fiber of the soul. Europeans are far in advance of us in this respect. Most yards are completely enclosed with hedgerows and, in many cases, with brick or stone walls. The garden is regarded as an outdoor living-room pervaded with the same sanctity of privacy as the house itself.



Plate 96. A Well-Balanced Planting

PRIVET GROUPS AND HEDGES

Another use of the Privet, showing one of the numerous possibilities of the plant. This style of pruning is called topiary gardening, and is pleasing enough in the country, where everything is natural and we like some formal effects for a change. But in cities the rule is reversed: we are so harassed by the conventionalities of form that all urban gardening, to be pleasing, should be in imitation of nature. This is a view of a country place.

In this instance, while the effect is attractive in its way, there are too many of one kind of shrub used. Monotony oppresses the sense. A variety of foliage, both in color and form, would be more artistic. There should also be variety in height and a few evergreens and deciduous trees would add to the beauty of the scene. Variety is the spice of art as well as of that elusive thing that we call life.



Plate 97. Privet Groups and Hedges

STATELY SILVER MAPLE ON GREENING AVENUE

The Silver Maple has much to recommend it. It is one of the fastest-growing trees we have, in this respect being surpassed only by the Eucalyptus Tree of California and the somewhat coarse Carolina Poplar which is indigenous to America. The foliage is a clean, beautiful green and the under side of the leaves has a silvery sheen, so that in a light breeze the tree has a peculiar atmospheric effect. One of the best avenue trees. See picture showing proper pruning of Silver Maple in this book.

This Maple must not be confounded with the common soft Maple. The original stock was imported from Scotland some years ago by the father of the writer, and the strain has been kept absolutely pure by propagating from it. As will be seen from the picture, the pose of this tree is as graceful as that of the Elm. It has the rare advantage of being practically immune from all insect enemies. As a park tree it is very satisfactory on account of its rapid growth and the beauty of its foliage, which is silvery on the under side.



Plate 98. Stately Silver Maple on Greening Avenue



Plate 99. A Flower-Bordered Walk

A FLOWER-BORDERED WALK

This walk is the side-approach to a mansion which is just beyond the large trees a short distance from the turn. There is a strip of grass fourteen inches wide on each side of the walk. This is a good width for the mower to manage in one swath. Next is an edging of hardy pinks, and back of them is a row of *Aletris*, commonly called Star-grass. Back of this is a taller-growing grass, *Eulalia Gracillima*. The effect of planting in continuous lines is to deepen the apparent length of the walk.

A pleasing variety would result from the use of some shrubs for bush effects. The *Hydrangea*, closely pruned in the early spring, and the *Baby Rambler* in red, white and pink colors, all varieties making a moderate growth, would be a good addition to the front border. For the back border the Ornamental Grasses, *Bocconia Cordata*, *Helianthus*, *Pyrethrum* and *Cassia*, would add much to the beauty of the view.



Plate 100. Alpine Plants in Rockery

ALPINE PLANTS IN ROCKERY

This is a garden of the wildly picturesque type. A flight of stone stairs affords a descent to a little glen through a mass of rocks on the shoulder of the terrace. Amid the rocks is a growth of Alpine plants with *Arabis* in the foreground; near the stairway are *Gypsophila* and *Dicentra*. There is a wonderful charm in this style of garden, especially for people of romantic natures. The view reads like a canto from Sir Walter Scott.

"Thus up the margin of the lake,
Between the precipice and brake,
O'er stock and rock their race they take."

In planning a landscape of this kind the artist must take his motif from the rolling character of the land. To thoughtfully work out the possibilities of the material in hand and treat them in a natural manner, is the true art of garden composition. The main features of some ideal landscape type must be present in the scene and enlarged and vivified into dramatic action without violating the unities. For instance, in the present scene, no sensible gardener would think of reproducing the pastoral charm of a Dutch landscape. The potential charms are present in the rugged scenery as nature made it; it is the work of the gardener to evolve them into a picture that shall mean something to the onlooker.

OLD-FASHIONED GARDEN

This is a section of a formal garden, showing the system of walks and some of the beds. The flags in the right foreground are German Iris. The large-leaved plants near the pergola are Day Lilies. The white bloom in the far background is a bed of Phlox. The circle is filled with Shasta Daisy. The vines on the pergola are Japanese Actinidia and Ampelopsis Quinquefolia. The large tree in the right background is a Linden; those in the distant yard are Maples. The pergola is of Tuscan architecture and semicircular in form.

The stone wall separates the garden from the residence portion of the grounds. Americans who travel abroad are impressed with the number of gardens that are enclosed with walls and many of these travelers, on their return home, build similar structures around their gardens. However, in America, the tendency is to build walls too high, apparently under the impression that if a six-foot wall is good, a twelve-foot wall is twice as good. A high wall interferes with a free circulation of air and completely shuts out the view, which is not desirable. Moreover, a high wall has the appearance of a fort, and if this thing continues we shall soon be a military nation!

It is safe to say that our architects will soon take hold of this problem in a serious way and temper the grotesque notions of some of our globe-trotters who, in true American spirit, are determined to surpass the world, even in the height of their garden walls. Meanwhile, I hope the tide of travel will not turn towards China!



Plate 101. Old-Fashioned Garden

UTILITY AND BEAUTY—FRUITS AND FLOWERS

This walk leads to the formal garden, and the view is from the garden end looking up the hill where the house stands behind the trees. A peculiar charm of the walk is the grape trellis on the left. The color-markings on the foliage are very beautiful and the odor of the grape-blossom is exquisite, to say nothing of that which comes from the "clustered spheres of wit and mirth" that hang from the vines in the fall. On the right border are Creeping Phlox, Dwarf Phlox, and Tall Phlox.

One of the hobbies of the American people is to have plenty of fruit to eat, and some of them have combined fruit and flower gardens as shown in this picture, which presents the idea of growing a row of grapes on the border of a walk leading to the fruit garden. In this garden there are apples, pears, plums, peaches, and the small fruits like currants, gooseberries, raspberries, blackberries and strawberries, supplying an abundance for the owner's table. The fruit garden can be bordered with flowers, or the flower garden bordered with fruit. A hedgerow of dwarf pear trees planted three feet apart and interlaced, espalier fashion, makes a very interesting garden.

Mr. Leonard Wilton, a Detroit lumber merchant, whose summer residence is on Grosse Isle, is a most enthusiastic advocate of this style of gardening. It was my privilege to be commissioned to make and execute his garden plans, in which there is a very complete combination of the fruit and flower idea. Besides the residence grounds there is a piece of ground directly across the road on which are a small greenhouse and a chicken house, and connected with them is a fruit garden comprising all the various kinds of fruits.



Plate 102. Utility and Beauty — Fruits and Flowers



Plate 103. Ash-Trees for the Street

ASH-TREES FOR THE STREET

The Ash-Tree possesses a gracefulness of form and a symmetry of outline that make it very appropriate for street planting. The trunk is straight and clean, and of a neutral gray color that is not obtrusive. The branches are broad-spreading and the foliage just thick enough to give a protecting shade but not thick enough to prevent the growth of grass. The picture also shows clumps of *Eulalia Univittata* *Gracillima* Grasses and many groups of dwarf-growing shrubs between the trees along the avenue.

One of the prettiest avenues that I ever saw is lined with a row of White Ash trees on each side. It is in the city of Milwaukee, Wisconsin. The tree is also very appropriate for lawn planting, and I strongly recommend its use for that purpose.



Plate 104. An Artistic Composition

AN ARTISTIC COMPOSITION

A good example of the Greening Pictorial System of Landscape composition. By selecting the proper varieties of shrubs for the soil and location, the most luxuriant growth was obtained. The house is fairly smothered with vines, and the shrubs are a compact mass of large, healthy, glossy foliage; and such thrift as this is what pleases us in a garden. We are charmed by the unconscious display of strength in whatever form exhibited, whether in the muscular feats of the athlete, the rhythmic cadence of the orator's florid rhetoric, or the garden's exuberance of growth as seen in this picture. The border next to the walk consists of *Funkia Variegata*, a low-growing silver-leaved plant, and then Hybrid Perpetual Roses. The vines on the house are *Ampelopsis Veitchii*, *Ampelopsis Quinquifolia* and Climbing Roses. The shrubs in the background are Lilacs, and in front of them are *Spiræa*, *Hydrangeas*, Japan Maples, *Weigelia* and *Rosa Rugosa*.

The other side of the house is treated in the same intensive fashion. As may be judged from the location of the house the yard is not large; for if it were, the house would be farther back. A small lawn is kept in the center; the borders are planted with trees and shrubs; in a far corner there is a rose and cut-flower garden, which is connected with the conservatory by a pergola; and in the other far corner is located the automobile garage — the whole making a very homelike scene on a small property.

WATER LILIES, *NYMPHÆA ODORATA GIGANTEA*

The leaves of this variety are very large, from 12 to 18 inches across. Sometimes they are tinged with purple on the under side near the margin, and as this is often turned up it gives a fine variegation. The flowers are large and pure white,

The Monroe marshes contain acres and acres of this popular water-plant, which is second in beauty only to the Egyptian Lotus, the latter being also colonized in the same marshes. Many scientific and literary societies meet here during the month of August to enjoy nature's most beautiful water garden. The River Raisin empties into Lake Erie at this point and, dividing into many mouths, forms an estuary containing many square miles of aquatic vegetation as serenely beautiful as a Dutch landscape.

Plate 105. Water Lilies, *Nymphaea Odorata Gigantea*

DEUTZIA LEMOINEII AND WEIGELIAS

This is another dwarf shrub that is very desirable as a "trimmer" at the base of tall shrubs or trees. It is *Deutzia Lemoinei*, a hybrid produced by crossing the well-known *Deutzia Gracilis* with *Deutzia Parviflora*. The flowers are arranged in large white corymbs. Branches are upright and stouter than *Gracilis*. The shrubs to the left of the walk are *Weigelia Rosea* and *Weigelia Eva Rathke*, the first with large cherry-like leaves and rose-tinted flowers in June, and the other one of the most attractive shrubs, bearing heavy clusters of crimson flowers nearly all summer.

I have endeavored throughout this book to convey my ideas in the plainest language without reservation or circumlocution. The careful student who has read the text pages and studied the illustrations up to this point must have a very intelligent grasp of the subject by this time and be capable of formulating a very practical planting plan for any kind of property. The same style of treatment will be continued to the end, and many more ideas presented. But if at any stage of his reading the student desires more information on any topic, or wants some new topic elucidated, he is invited to write me freely. The consuming ambition of my life is to advance the cause of a more beautiful America, and I will always consider it a joyful labor to help my friends work out their landscape problems.

Plate 106. *Deutzia Lemoinei* and *Weigelias*



Plate 107. A Sunken Italian Garden

A SUNKEN ITALIAN GARDEN

This view exemplifies a kind of garden that is the farthest remove possible from a natural garden. It is, in fact, a form of vegetable sculpture where every plant is sheared to perfect symmetry. The fancy bed in the middle ground, surrounding the urn, is made of *Coleus* in different colors and is never permitted to become disheveled by long growth. The gardeners swing their ladders across it and each plant is barbered with a fidelity that would do credit to a professional tonsorialist.

Many people of refined tastes like this kind of garden, but personally I do not like them, especially for the North, where our season for enjoying them is very short. Moreover, the floral decorations are of a character that requires the constant attention of a gardener, and it is not yet a common practice to employ professional gardeners.

In connection with this kind of a garden it is in good taste to use some formal trees in tubs, like Bay Trees, and certain pyramidal Evergreens, such as *Thuya Occidentalis* and *Thuya Pyramidalis*. The last two make pretty subjects for bordering avenues, and many of them were distributed along the line of march during the Custer celebration in Monroe in June of this year.



Plate 108. Natural Pond

NATURAL POND

This is not a water garden because a garden implies preparation and cultivation. The above is a natural pond or small lake on a large estate, the borders being planted with *Iris*, *Crimson Eye*, *Cardinal Lobelia*, and such shrubs as *Canadian Elder*, *Tamarix*, *Forsythia* and *Pussy Willow*. The trees are *Pin Oaks*; the others are *American White Elm*, *Maples*, *Linden* and *Beech*.

A scene of this kind is adorned the most when adorned the least. There are many such scenes throughout the Middle West, Michigan having about 5,000 lakes and Minnesota 7,000. Most of them are unappreciated by the people who own them, which goes to prove the great truth that what we don't know we are not aware of. It is a dangerous thing to meddle with this kind of natural landscape, for it is almost beyond the power of man to conceal his tracks. Any effort at improvement generally ends in disclosing some stupid artifice that spoils it all.

AN ARTISTIC ENTRANCE GROUPING OF EVERGREENS AND TREES

An effective use of evergreens bordering the approach to an estate. Those in the foreground are Colorado and Kosteriana Blue Spruce; the tall native growth consists of Norway Spruce, White Pine, Fir, Larix, Maple, Oak, Platanus and Birch.

Similar ideas to this are also carried out in cemetery improvement where the entranceway is recessed and the gate is a considerable distance from the street. The picture has a great deal of meaning and it is so simple in treatment that it is as easily read as a child's primer.



Plate 109. An Artistic Entrance Grouping of Evergreens and Trees

A RESIDENTIAL HOTEL

A very select residential hotel can afford the expense of such a garden as this, but for the ordinary property hardy plants would be better. The large-leaved plants on the right bottom corner and near the terrace in the center are Cannas; the ribbon-beds along the walks are scarlet Geraniums; and the fancy bed in the lower left-hand corner consists of Coleus and Echeveria, commonly called Hen and Chickens. The hedge on the terrace is a Berberis Thunbergii, one of the prettiest plants of recent introduction. The Evergreens are Norway Spruce and Thuja Occidentalis.

Of course this style of planting is practicable only where a gardener is employed, as without constant attention it is a failure. A nice way to brighten up a hotel property is with trees in tubs, and there are many kinds that do well, small and large. There are small Cedars, like Thuja Globosa and Thuja Compacta, that make fine porch ornaments. And in connection with such a hotel there is usually a garden café. Sometimes this café is in a tiled court like a Spanish patio, and the floral decorations are in tubs and vases. In cities where hotel properties have no garden space, it is a good idea to build the café on the roof, as was done by Mr. L. W. Tuller, who has installed a magnificent hotel café on the roof of his hotel, the Hotel Tuller, Detroit, Mich.



Plate 110. A Residential Hotel



Plate 111. The Wrong Way of Planting the Home Grounds

THE WRONG WAY OF PLANTING THE HOME GROUNDS

Here are trees and shrubs but no picture. Indiscriminate planting without regard to expression is not artistic. The mind wanders from one detail to another and finds no meaning in anything. This is because the composition is faulty. There are no contrasts—no lights and shadows—no force in the grouping. It does in fact give us a “tired feeling” to look at it.

There is no great merit in merely planting trees here and there throughout the yard without pictorial arrangement; the birds and squirrels do that much; in fact I publish on another page a miniature landscape made by the Bower-Bird which shows order and, from the bird point of view, a very artistic composition. For description and illustration of the Bower-Bird, see page 96.

The Greening Pictorial System of Landscape Gardening does what its name implies; that is to say, it makes a picture of a landscape without additional cost to the owner. It costs no more to do things the right way than the wrong, and in most instances considerably less.



Plate 112. The Right Way of Decorating the Home Grounds

THE RIGHT WAY OF DECORATING THE HOME GROUNDS

The Greening idea of a beautiful landscape is that of a living picture full of expression. In this scene a heavy planting of trees and shrubs borders the yard, leaving the lawn area open and therein lies the charm of the picture. We are always pleased with contrasts of related subjects. In the language of the painter this is expressed in “high lights and shadows.” In rhetoric the figure of speech known as antithesis is used to express contrasting ideas or emotions. The great force of Shakespeare as a dramatic writer lies in his antithetic intensity. “He put noons and midnights side by side. His tears oft fell upon his smiles. No other dramatist would have dreamed of adding to the pathos—of increasing our appreciation of Lear’s agony, by supplementing the wail of the mad King with the mocking laughter of a loving clown.”

And so in gardening, a group of trees and shrubs without a proper lawn setting does not mean much, and a lawn without a framework of trees and shrubs expresses very little; but a combination of both in due proportion gives us the contrasting lights and shadows that sway the emotions.

To say of a garden that it is emotional as the plays of Shakespeare is to confer the highest praise, and this garden merits such praise.

The picture represents a banking of hardy shrubs—*Hydrangea*, *Spiraea Van Houttei*, *Philadelphus Aurea* and *Deutzia Gracilis* around the circle, with *Spiraea Reevesii* to the right and *Spiraea Van Houttei* to the left of the steps. There are mixed shrubs on the left of the lawn ranging from dwarf to tall-growing varieties. Maples and Birches define the sky-line.

TREATMENT OF RESIDENTIAL GROUNDS

Open lawn treatment of large residential grounds. The shrubs near the house foundation are *Spiraea Van Houttei*. The large specimen trees are there "because they're there." The arrangement is not the best, but the grove was on the grounds at the time the house was erected, and the trees are too valuable to destroy and too large to move safely. Accordingly all efforts were directed towards increasing their individual beauty by pruning and enriching the soil and by additional planting. It is wanton waste to cut down trees that can possibly be saved.

In the case of trees that have become diseased it is better to employ a professional tree-doctor to remove the infected parts and arrest further decay. Antiseptic solutions are used and all cavities are filled up, pretty much in the same manner that a dentist fills a tooth. The Greening Landscape Company maintains a force of expert tree-surgeons, and owners of large estates are invited to correspond with us.



Plate 113. Treatment of Residential Grounds

AN ARTISTIC DRIVEWAY

Art is the sensible way of doing things. This driveway is artistic because it gives sensible service. The carriage-turn gives an approach to the front entrance and the service-drive leads to the rear entrance, where the grocer, iceman and others make their daily deliveries. In planning a carriage-turn nowadays the ever-present automobile must be reckoned with, for it requires a circle of 44 feet in diameter to turn a large car and 50 feet is better.

The two large trees in front of the house are Silver Maples and the one on the left is an Oak. The vines on the building are *Ampelopsis Veitchii*, and the shrubs near the house are *Symphoricarpos Alba*, *Symphoricarpos Rubra*, and *Berberis*, which do well in the shade. Those on each wing of the ground are mixed shrubs in colonies.

On a property of this character the best kind of driveway is a macadam foundation. When properly built it becomes as hard as cement, smooth and clean, but it is well to use granite screenings for the top dressing. Limestone screenings are often so soft that they wear to an impalpable powder, and blow all over the yard—a fine, white dust like baking powder, that soils clothes and disfigures the landscape.



Plate 114. An Artistic Driveway



Plate 115. Catalpa Bungei (Chinese Umbrella-Tree)

CATALPA BUNGEI (CHINESE UMBRELLA-TREE)

The Catalpa Bungei, also known as Chinese Umbrella-Tree, makes a very attractive border for a driveway, the large luxuriant heart-shaped foliage and the perfect symmetry of the tree giving it a stateliness of aspect that lends a tone of dignity to the surroundings. The effect is subtropical.

This garden scene is from the yard of a fellow-nurseryman of this city, and the pride of his home centers largely on the beauty of these trees, which make a pleasing entrance from the avenue to the barn at the rear of the lot. It shows good taste in construction and testifies to the great fact that the artistic sense is a very common commodity after all, and that the Great Purveyor, or whoever it is distributes that kind of goods, allotted a generous portion to my friend.



Plate 116. Rustic Summer-House and Catalpa Bungei

RUSTIC SUMMER-HOUSE AND CATALPA BUNGEI

This summer-house is made of natural birchwood and the interior appointments are of rustic furniture. The tree is a Catalpa Bungei, which is produced by grafting the top on a Catalpa Speciosa stock at the desired height. It has a very compact head and makes a substitute for the Bay-Tree at small cost. This tree is also grafted near the ground, in which shape it makes a beautiful individual subject to soften the high lights in an open natural garden.

This view is from the yard of another fellow-nurseryman, and the main object of its introduction here is to show that Monroe has its full quota of good people. This man is passionately fond of children and has built the rustic playhouse for their enjoyment. He has none of his own, however, a fact which I promised not to tell, and the reader will please not quiz me on the subject, lest in a moment of thoughtless imprudence I be led to violate my pledge.

SCREEN FOR BARN

Barns and sheds are necessary on the farm; but it is not necessary to let their plain blank walls offend the sight. Groups of evergreens shut off unsightly views, are pretty in themselves and make the lawn look much better. When planted on the north side of buildings they lessen the force of the winter winds and add greatly to the comfort of stock. In the present instance *Thuya Occidentalis*, *Thuya Pyramidalis*, and *Picea Excelsa* were used. The shrubs near the house are *Spiræa Van Houttei*, *Symphoricarpos Rubra*, *Rhodotypus*, *Rosa Rugosa*, *Deutzias*, *Forsythias*, and *Weigelia Variegated*.

There is no reason why farm properties should not be made attractive, especially in these days of high prices for produce, when the agricultural interests of the country are very prosperous. Many farmers are buying automobiles, which is all right, but I submit that the improvement of home grounds is at least as important as to own an automobile.



Plate 117. Screen for Barn

A MASS GROUPING OF HARDY SHRUBS

A good illustration of the Greening Pictorial System of Landscape Gardening, with large open lawn and heavy background of shrubs and trees. Observe the varying height of planting, from the tall trees in the far offing to the low shrubs that melt in a soft vignette near the lawn. Maples are used in the extreme background for the density of the foliage, and the heavy banking of shrubs is made up of *Berberis Thunbergii* and *Vulgaris*, *Deutzia Gracilis* and *Crenata*, *Syringa Grandiflora*, *Persian Lilac*, *Lonicera Tartarica*, *Weigelia Rosea*, *Golden Elder*, and *Staghorn Sumac*. This garden has beautiful fall coloring, the Maples, Sumac, and *Berberis* turning to bright tints of red and gold. The house faces the west, and the beauty of the sunset as the last shafts of golden light sink below the horizon is beyond description.



Plate 118. A Mass Grouping of Hardy Shrubs



Plate 119. *Hydrangea paniculata grandiflora*

HYDRANGEA PANICULATA GRANDIFLORA

The *Hydrangea paniculata grandiflora* in bloom time is the delight of children. An effective screen for a low, old-fashioned porch. It requires close pruning in March and thrives everywhere, but succeeds best in rich, well-cultivated soils. The flowers are in terminal trusses and of immense size.

Hydrangeas should be planted where plenty of water can be applied, for they need more water than most shrubs. The very name *Hydrangea* is derived from the same root that gives us the word hydrant—the Greek *hudor*, meaning water.

In cases where the foliage suffers from the shot-hole fungus, an application of flowers of sulphur with a bellows will check the disease.



Plate 120. Recessed Cemetery Entrance

RECESSED CEMETERY ENTRANCE

A recessed entrance to a cemetery with the sides heavily planted with Pines. This gives the effect of an antepark and adds greatly to the architectural richness of the gateway and the dignity of the approach. The same style of treatment continues for a short distance on the inside, after which the park-like effects of the modern cemetery predominate. In the above picture the tall-growing varieties are at the rear and the dwarfed kinds in front, thus making easy gradations from the lawn to the sky-line.

Since it has become the fashion to lay out cemeteries with park effects, they are more frequently visited than they were formerly, many people using them as parks. When properly treated their surroundings are not morbid, as one might suppose, but rather are they promotive of a contemplative and philosophical cast of mind.

HYDRANGEA PANICULATA GRANDIFLORA

Another use of the *Hydrangea Paniculata Grandiflora* is in large beds planted solidly with this one variety, about twenty-four inches apart, and in a sunny exposure they make a glorious show from August on to frost. Severe pruning in the early spring is necessary, as it bears its bloom in terminal trusses on the current year's growth of wood.

It must be remembered, however, that the *Hydrangea* is a special-purpose plant, and the common practice of dotting the landscape here and there with single subjects is not in good taste. Probably no shrub has been more abused in this respect than has the *Hydrangea*. In condemnation of this indiscriminate planting Prof. Bailey cites the parallel case of a lady who came in possession of some church doors. Of course she would use the doors somehow, so she put up posts at various places in the garden to hang them on, with as much reason and taste as the usual promiscuous planting of the *Hydrangea*.

The picture shows groupings of shrubbery in solid beds extending along the border of a drive through a thickly planted wooded park.



Plate 121. *Hydrangea Paniculata Grandiflora*

SCENE IN A PARK SUBDIVISION

A very artistic way of laying out a "quality subdivision" is in a parklike arrangement of the streets, which are laid out in curves instead of the regulation checker-board pattern. This picture shows a turn in the street and displays a great wealth of foliage. The park idea is emphasized by the heavy planting, and the house in the background is the home of an artist who gathers inspiration for his work amid his surroundings.

The border shows careful planning as to the height of the various subjects used, low perennials in front, then shrubs, and lastly trees in the background, with a similar facing of shrubs and perennials on the house side.

In laying out a subdivision after this fashion it is a good plan to leave certain reservations for park effects, and these should be dedicated the same as the streets, and the streets themselves should be heavily planted. If the country is rolling, the streets may follow the ravines when drainage is provided.



Plate 122. Scene in a Park Subdivision



Plate 123. A Pergola and Pergola Fence

A PERGOLA AND PERGOLA FENCE

We have here an illustration of a pergola and pergola fence overlooking a garden. The vines on the pergola are the *Clematis Paniculata*, and at the base of the fence is a bank of *Deutzia Gracilis*. In the background we see the tops of arching Elms, which give grace and dignity to the picture and add variety to the sky-line.

Just beyond the pergola fence is a garden on a much lower level, in the center of which is a tea-house in purely Japanese style. The material is of bamboo. All around the tea-house is some miniature manufactured scenery, like small hills, rivulets, etc., many dwarfed trees being used.



A FEATHERED LANDSCAPÉ GARDENER

The Bower-Bird of New Guinea not only builds one of the most wonderful nests known to naturalists, but it actually lays out a garden. It picks the blossoms of orchids and arranges them in alternate rows of mauve and white. Along these rows of flowers it joyfully dances to its mate—a sort of Virginia reel, I imagine. The illustration shows one of these bird gardens with its feathered occupants.

This bird is one of the most remarkable creatures known to natural history. Its nest is really a cabin built of sticks, and surrounded by a perfectly-kept garden composed of twigs and moss, studded with brilliantly-colored flowers, fruits and insects. As the curious ornaments become faded they are constantly replaced by fresh ones, so that scientists are inclined to credit the bird with the possession of the artistic sense. In these decorated playgrounds the males meet and pay their court to the female, the bower being used purely for purposes of recreation and not as a nesting place. These birds are chiefly found in the Owen Stanley range, of British New Guinea.

See reference to this bird on page 90.



Plate 124. A Feathered Landscape Gardener

JAPAN MAPLES

This picture shows a colony of Japan Maples at the base of the pergola. They are dwarfed trees of exquisite coloring, and the foliage of many varieties is daintily cut in lacelike patterns. They are of spreading habit and show off to advantage when planted in the foreground of taller shrubs. The Greening Nursery Company offers a large assortment of home-grown plants which are decidedly stronger and hardier than the imported stock. The colors run from green to blood-red and bright gold, and produce most distinctive and charming effects.

These little trees exemplify a racial characteristic of the Japanese people, namely, their patience, persistence and perseverance. By dint of pruning, through many generations, the nature of the Maple has been changed until the trees are dwarfed, the type being fixed to permanence. And as trials, troubles and tribulations bring out the finer elements of human character, so these little trees have come through the severe ordeal of pruning punishment with added glories of color and dainty leaf forms.

The climbing vines are Honeysuckle.



Plate 125. Japan Maples

SIDE APPROACH TO A MANSION

This approach shows a row of Rose Trees on the left and a bed of Deutzia Gracilis on the right. Note the flagstones leading to the library entrance. These are made of cement, but they are not mere cement slabs. They rest on cinders and grout the same as a sidewalk.

The proper way to lay out a sidewalk with stepping-stones is to excavate the whole path and put up rails at the proper grade, after which the space is partitioned off, making the stones thirteen inches and the space between them eleven inches. This accommodates a 24-inch step, which is just an easy, natural walk. Many engineers take rough measurements in this easy walk and get tolerably accurate results. Others use a forced stride and cover approximately three feet, but only an ogre in seven-league boots can maintain that gait. What may be called a garden walk is just two feet to the step. The spaces for the flags are first filled with cinders, and then concrete grout, after which the cement surface is laid. The spaces for grass are then filled with soil and sodded flush. A rough finish to the cement is more artistic than a smooth finish.



Plate 126. Side Approach to a Mansion



Plate 127. A Country Home Surrounded with Trees

A COUNTRY HOME SURROUNDED WITH TREES

Who can put a price on the value of such a grove? How cool in summer! How shelteringly warm in winter!! The trees are Maple, Elm, Ash and Beech. The shrubs are Thorn, Sumac, Elder, Witch-hazel and Dogwood.

It is not generally known that the intense summer heat is appreciably modified by the presence of trees, aside from the shade they give. They are constantly pumping water from the subsoil, the temperature of which is 30 to 40 degrees colder than the atmosphere; so that trees possess considerable coolness, which they impart to the surrounding air. The same law prevails in the winter, but the conditions are reversed: the air is colder than the trees which, on this account, soon lose their warmth by radiation. Hence the loss of many foliage plants through delays in transportation in the winter, when the plants could withstand a short exposure without injury. Many lawsuits have resulted to determine the rights of floral shippers and to define what constitutes prompt dispatch.



Plate 128. A Grass Walk in a Garden

A GRASS WALK IN A GARDEN

Grass walks are very appropriate in a garden, as they are in keeping with the general air of the place and tend to preserve the unities. Besides, a good turf has a peculiar resiliency that is very agreeable to the foot, its one fault being that immediately after a rain it is too wet for comfortable walking, and that is just the time that a garden is most interesting! At the same time it must be remembered that neither a brick nor gravel walk is quite clean after a rain, for more or less mud will splash unless a wide margin of grass be kept, in which case there will be double work to do, namely, to edge the grass and sweep and wash the walk. Taken altogether the grass walk will be very satisfactory in a small formal garden. On the other hand if it is very large it will be better to dispense with grass altogether and have merely walks and flower-beds, in which case curbs of boards or light iron-sheeting, partly sunken in the ground, will define the borders of both.

In this garden are Crimson Eye, Pyrethrum, Boltonia, Helianthus, Eulalia, etc. The trees in the background are Maples.

A REAR APPROACH

These houses face the lake, and consequently the approach is from the rear. The carriage-turn is near the rear entrance, and the driveway disappearing to the left goes to the paddock and barn. The shrubs in the foreground border the street line, and the lawn has been kept free and open. Observe the heavy planting of shrubs around the houses. They give privacy to the surroundings and naturalize the houses themselves.

As a rule a driveway of this kind should be built of macadam and, if the subsoil is very soft, a Telford foundation should be laid on the metal of the roadway. Thorough rolling of the metal and of each course of stone is very important, and a standard roller weighing seven tons should be used.

It is a fact worthy of remark in this connection that both McAdam and Telford were Englishmen, and that their names will be connected for all time with the science of roadmaking. So far the Americans have shown very little originality in this line of work, and, if we may be permitted to carry frankness to its limit, let us say that we are not even good imitators. The highways of this country bear no comparison to those of England, a fact which every traveler well knows.



Plate 129. A Rear Approach

A RIPPLING BROOK

Water in motion adds a great deal to the animation of a garden. Here is a mere rivulet, a little thread of water, and yet as it cascades and dances over the rocks it makes music to the ear. In the foreground are flat stones across the water to make an easy ford, and on both banks are plants that favor low, wet ground—Iris, Hibiscus, Loosestrife, ornamental grasses and Forget-me-nots. On the higher ground to the right of the picture is a large bed of *Berberis Thunbergii*; the bed in the corresponding position to the left is *Rhodotypus*. The evergreens near the bridge are White Pines and Norway Spruce. The large trees are Elms.

In some sections natural springs are common and it is an easy matter to impound them with a cement well-head of a size commensurate with the flow. Having this water-supply, many ingenious ways will suggest themselves for its use. Sometimes a ravine can be dammed to form a reservoir and thus collect considerable water.

And lastly the public water service can be utilized, and it is surprising what a small amount of water it does take to make a very beautiful scene. I have a plan which is applicable to the smallest city property, even as small as a 30-foot lot, which I will be pleased to submit to all interested clients. It can be used to colonize fish, frogs, turtles and alligators.



Plate 130. A Rippling Brook



Plate 131. A Beautiful Vista

A BEAUTIFUL VISTA

This is not a formal walk. It is merely a ramble through a grove. On the right is a perfect thicket of rugged natives, such as Hemlock Spruce, Beech, Prickly Ash, and Sumac. The foreground on the left has a colony of Yucca and Bocconia Cordata; beyond it is composed of a wild growth of native trees and shrubs.

This class of work is adapted only for large properties which have a wood-lot adjunct. The plantings are very dense, and this walk is simply the entrance, which reaches the residence by a winding way. A large variety of trees is used and they are planted promiscuously without any regard to formality except to make this approach. The effect is romantic. A poet would call it Cupid's trysting-place. The imaginative reader can see the flight of his barbed darts as they speed from heart to heart, and hear the sighs of men and maidens who are tenderly touched with the exquisite agony of love's sweet pain.



Plate 132. An Italian Garden

AN ITALIAN GARDEN

View of an Italian garden from the loggia or tiled court adjoining the house. All the architectural embellishments are of chiseled stone, including the Tuscan columns of the pergola, the settee and the balustrade surrounding the garden. The evergreen trees are the George Peabody Golden Arbor Vitæ, or Thuya Lutea. The plants in urns are tender exotics that require housing in a greenhouse during the winter.

Beyond the pergola is the natural garden. The ground is rolling, several ravines corrugating the surface in a number of ridges. One of the ravines is converted into a little rivulet, across which a natural bridge is built, the bridge itself supporting two large Bittersweet vines, whilst the borders are heavily planted with shrubs. Another ravine is used as a fernery, where many varieties of this peculiar family of plants are grown. One ridge is completely planted to fruit-trees, and on another is a pavilion adjoining a plateau which is utilized as a tennis court.

ONE YEAR FROM TIME OF PLANTING

The recessed entrance is so eminently proper for cemeteries that it will soon receive general acceptance. This picture shows a gateway one year from the time of planting, and in a few years more it will become a little classic of its kind. The pines possess a grace of demeanor and modest aspect which it pleases us to associate with God's acre. The large tree forms a beautiful canopy over the gateway. See the article on cemeteries for varieties of trees, shrubs, vines, etc., suitable for that class of landscapes.

In this connection I want to remark that the finest cemetery in the world is that at Hamburg, Germany; and its great beauty lies in the compact planting of the garden areas and the general air of good care that it receives. There is no substitute for good care. Work is the price that all must pay for success in gardening as well as other things in life.



Plate 133. One Year from Time of Planting

A PLEASING TREATMENT OF A BACK YARD

The features of this garden are the pergola and shelter-house. The shrubs at the base of the pergola are the *Deutzia Crenata*, which is very pretty with its roselike flowers; the vines are *Wistarias*, which bear long racemes of bloom in summer. The tall tree in the background is an American Elm, than which there is none more majestic. This is a new garden and will be much prettier in another year.

A pergola can be used in almost any yard without regard to size, and it makes one of the most pleasing features that can be introduced. It is useful and ornamental, and adds an artistic charm to a landscape that cannot be obtained otherwise. A good thing about the pergola is that it permits the introduction of climbing vines to adorn it, many varieties being suitable for the purpose. It also justifies the use of many shrubs which otherwise would be out of place in the middle of the yard. They can be planted between the columns, or on the sides to serve as a screen.



Plate 134. A Pleasing Treatment of a Back Yard



Plate 135. Strong Contrasts

STRONG CONTRASTS

"And the great Elms o'erhead dark shadows wove."—Longfellow.

This park scene conveys the idea of immensity, every feature being developed on a large scale. The high lights and shadows are intense. The lawn area is absolutely unbroken, and the border planting consists of a thick growth of large trees to comport with the general aspect of the landscape. The effect is so forceful as to fairly overwhelm the sense with awe at the majestic grandeur of the scene. The trees are Elms and Maples, with Flowering Thorns, Barberries and Elders in the foreground.



Plate 136. The Lure

THE LURE

The hall is wide and cool and dim,
And o'er the porch there droops the limb
Of an old Oak, and roses climb
And hide and shade it all the time.

An ideal place to bill and coo,
To hold a little hand and woo
With honeyed words some "ladye faire"—
I'll bet a widow's living there.

The lawn is wide and deep and green,
And 'thwart its sward there may be seen
The shimmering sheen of golden light,
The Sun-God's blessed gift of sight.

And on the borders of the lawn
With greatest care the lines are drawn,
Where family groups of shrubs are grown—
Each in allotted space alone.

FOUNTAIN IN ITALIAN GARDEN

This is known as an architectural garden. The features are the fountain with gargoyles, the wall with flower vases and stone settees. The evergreens in the foreground are *Thuja Occidentalis*; those in the background are *Thuja Globosa*. Those in the far background beyond the fence are Pines, Firs and Spruces. Such scenery is very effective as part of an Italian garden, but it is seldom appropriate in Northern lands.

This garden shows very poor taste. A great deal of money has been spent in architectural constructions, but the floral decorations are very meagre. There is no ratio of artistic attributes. The structural engineer or building architect did his work well, but the landscape gardener was not consulted. The two should work together. A French philosopher called geography and chronology the two eyes of history, and with equal triteness I say that design and horticulture are the two eyes of gardening, and that either without the other is half blind. To give full vision to the art of gardening is my sole object in publishing this book.



Plate 137. Fountain in Italian Garden

FLOWER-COVERED TERRACE

This picture shows a beautiful treatment of a terrace. Instead of the bare slopes, which are difficult to manage with a lawn-mower, there is a growth of thick-matting flowers and foliage. On the border there is *Aegopodium Podagraria*, commonly known as Goutweed; the large-leaved plants are Day Lilies; the little round-headed trees on each side of the steps are *Thuja Globosa*; the vines on the house are *Ampelopsis Quinquefolia* and *Bignonia Radicans*; the trees to the right are Maples.

There is quite a strip of lawn between the planting on the shoulder of the terrace and the porch rail, and this lawn serves as an extension of the porch itself. Beyond the terrace is the lawn proper, extending to the property line in front, where a hedge serves to define the border. In the lawn, but on each wing, there are a few ornamental trees, whilst the two side borders are heavily planted with shrubs and hardy perennials.



Plate 138. Flower-Covered Terrace



Plate 139. A Lawn Scene

A LAWN SCENE

These grounds adjoin the mansion shown on page 103 and are a part of the same estate. It will be seen that the sylvan effects predominate and that the general air of the place is that of contemplative retirement. A delightful retreat for a brain-fagged professional man. The large clump of shrubs in white bloom consists of *Viburnum Opulus*.

This wide unbroken lawn and the amplitude of sky are sublimely impressive. The tall, large trees on the borders give a mellow tone suggestive of the ideal, of duty done, of thoughtful retrospection, of a satisfying sufficiency, of something not easily definable, but for which I will hazard the name of distilled comfort — what Trippler would call the liquid-air of happiness.



A MEMORY GARDEN

This mixed border contains quite a range of plants. On each side of the walk is a row of *Phalaris Arundinacea*, a low-growing Ribbon Grass and back of that are Foxglove, Canterbury Bells, Bleeding Heart, Phlox, Columbine, etc., while back of the perennials are flowering shrubs in great assortment, containing nearly all the hardy kinds.

It is, in fact, a Memory Garden containing many cherished plants, the gift of loving friends, and for this reason every flower is a treasured keepsake.

I suggest this method as the best way to exchange friendly tokens. There was a time when ladies contributed to each other's crazy-quilt by the exchange of dress material — portions of garments worn on certain festive occasions — wedding garments and christening garments being especial favorites. Later there came the vogue of the autograph album in which verses were indited for friendship's sake. Both of these customs were beautiful, and I regret that they have become obsolete. As a substitute I offer the memory garden, which will add to a noble sentiment the beauty of growing things. There is enough of hard reality in life: let us fill our days with friendly devotion and entwine within our lives the sweet impulses that fill the heart with joy.



Plate 140. A Memory Garden

GARDEN WITH SUNKEN LAWN

This is merely the back yard of a greenhouse; and yet there is something about it that pleases. What is it that compels attention? It is the most simple thing imaginable—a sunken lawn. It is only common grass such as we see elsewhere, but the lawn is not conventional. It is different, that's all! And therein lies the charm. We get tired of the monotony of sameness, and in this case the little artistic deceit of sinking the lawn produces a wonderful charm. In laying out new lawns the mistake is often made of forcing every line to a common mold, when the natural, ravine-like undulations are much prettier. Then the owner spends \$5,000.00 to go to Europe to view different scenery!

The shrubs on the right are Lilacs, which are again receiving the attention they deserve and are being widely planted. At the foot of the greenhouse is a bank of *Euonymus Radicans*. In the background is the rose garden, comprising a collection of the different classes of roses with arches for the climbers.



Plate 141. Garden with Sunken Lawn

DEUTZIA GRACILIS AS A BORDER

This bank of low shrubs is composed of *Deutzia Gracilis* in snowlike bloom. This shrub has the cheerful habit of being contented in the shade and makes a fine banking against a group of trees. It is also desirable near the foundation of buildings, especially where a low growth is desired near basement windows.

The large trees in the background denote age, and as it is one of the prerogatives of age to contemplate, retrospect and speculate, it may be said of this garden that it is retrospective. The sun of life is turned backward. We look, and dream of youthful days, of barefoot boys, of knee-skirt girls, of joyous days, when laughter was spontaneous and care unknown. It is probably for this reason that the men of very large means in the East, when the mood is on them to erect a five-million-dollar castle, surround it at once with a forest of large trees transplanted at enormous cost. Sometimes as much as \$5,000 is paid for a single tree.

Plate 142. *Deutzia Gracilis* as a Border



Plate 143. A Beautiful Parterre

A BEAUTIFUL PARTERRE

The French have a beautiful word to describe a garden of large size that is partitioned off or very formally patterned. Such a series of connected gardens is called a "parterre" in the same sense that an assemblage of colleges is called a university. In the above picture we have in the foreground a distinct garden unit that is complete in itself, but still relatedly connected with other garden units beyond, the whole forming a panorama of varied scenery. This style of gardening is applicable only to large estates or very pretentious avenues. The Greening system develops all the different styles of effect that are in accord with good taste in American gardens.



Plate 144. Back-Yard Treatment. Hydrangea Paniculata

BACK-YARD TREATMENT
HYDRANGEA PANICULATA

This is the back yard of an apartment-house in a good residence portion of the city. The heavy planting consists of *Hydrangea Paniculata*, and as it is a sunny exposure there is a screen of vines in the background. There are two Century Plants in tubs. The edging is of *Nasturtium* and *Sweet Alyssum*. Observe the window-boxes in the upper terrace. And in addition to all these floral beauties there is a wide expanse of lawn, which is used in common by the tenants to play games and for drying clothes. Portable clothes-reels are used.

Apartment houses are an American institution. So far as I know, the idea originated in Chicago, about the time of the Columbian Exposition. A building of this kind will house several families, and with co-operative kitchen and café, together with furnace-heat and janitor service, it is very much like a residential hotel. The idea has spread all over the country until even small cities have apartment houses now. They fill a certain well-defined want in our domestic economy, but in them children are tabooed, which augurs ill for the future of family life. Without the joyous prattle of children, life is a vain, barren and empty thing.

A ROSE GARDEN

This is the rose-garden of the parterre shown on preceding page and this area contains nothing but roses. On each side of the walk is a row of rose-trees produced by grafting free-blooming varieties on hardy rose stock, and as the heads are four or five feet from the ground the rose-trees are planted among the bushes, making in effect a two-story rose-garden. Each bed is eight feet wide and contains five rows of bushes, planted a foot and a half apart and one foot from each border. The middle row consists of Hybrid Perpetual, and the two rows on each side of Hybrid Tea, Hybrid Noisette and Dwarf Polyantha. Next to the trellis on each side is a bed two rows deep and the trellis itself supports the climbing varieties.



Plate 145. A Rose Garden

A FORK IN THE ROAD

When two roads unite they should rapidly converge, as in the above instance, and the point of convergence should be filled with shrubs, so that each is masked from the other. When approached from the other way the divergence comes in the nature of a surprise and gives a pleasing diversity to the scenery.

A drive through an evergreen forest is peculiarly refreshing. The trees exhale a balsamic odor that is soothing, especially to people who have lung trouble. It is said that consumption is unknown in Pine regions. The above forest consists of Pine, Spruce and Cedar.

Elsewhere in this book is an article on reforestation which the reader is asked to study carefully. Unless something be done to restore our forests we shall soon stand face to face with the problem of a completely denuded land, and such scenes as the one represented in this landscape will remain only as a vanished dream, whilst to the next generation they will be as a dream undreamed. There is a wonderful beauty in a forest scene which Americans are slow to discover. We have not yet learned the art of seeing. I think it was Martineau who said, "It is not light we need, but eyes." We look but we do not see. Our forests are being daily devoured by the hungry maw of the sawmill, and we stand as idly indifferent as a statue of salt.



Plate 146. A Fork in the Road



Plate 147. An Old-Fashioned Garden

AN OLD-FASHIONED GARDEN

This garden furnishes a great amount of cut-flowers at the same time that it contains a number of trees for shade and for variety. The old apple-tree in the left foreground is not very symmetrical, as apple-trees seldom are, but the owner has a sentimental attachment to it and for that reason it becomes a beautiful subject for the garden; for let it be remembered that a garden is for the affections. Other fruit-trees are Peach and Plum. Between these fruit-trees are beds of Pinks, Pæonies, Phlox, Gaillardia, Coreopsis, etc.

This subject is a good representative of the European idea of garden finish. On the road from Charlottenburg to Potsdam, where dwell the aristocrats of that region, there are many such gardens, the gardeners vying with one another in originality of construction and arrangement. A large number of climbers are used and stone walls surrounding the gardens are common. In the latter case large iron gates in fanciful designs, and bearing the monogram of the owner or the name of the estate, are also used.



Plate 148. A Large Formal Garden

A LARGE FORMAL GARDEN

A formal garden on a large estate showing large beds, each filled solidly with one kind of flowers. The garden contains Shasta Daisy, Phlox, Delphinium, Coreopsis, Hibiscus, Gaillardia, etc.

In a garden of this kind the intention is not so much to have any fixed formality about the shape of the beds as to have an abundance of flowers for cutting for table decorations and other such uses in vases. Many annuals are used and much ingenuity exercised in their grouping. Such a garden is not expensive in material but is quite expensive in labor. Hot-beds are provided to start certain seeds very early, and then there are cold frames to receive the young seedlings and nurture them until outside conditions are favorable. The steady employment of a gardener is necessary.

A FORMAL GARDEN

A formal garden at the rear of a mansion showing a great wealth of perennial flowers. The large-leaved trees in the middle ground are Catalpa Bungei, and the vines on the house to the right are Chinese Matrimony Vine; likewise those on the pergola to the left. The border of the walk consists of Shasta Daisies, and the perennials are mostly Lilies and Phlox.

Near the trees is a statue of some celebrity admired by the owner, which is a very refined way of paying a worthy tribute to those we love. How poor this little world would be without the memory of our mighty dead!

The buildings surround the yard, and the walks are of glazed brick, the effect being that of a Spanish patio or tiled court, slightly modified. Climbers were freely used, fairly smothering the sides of the building; also many Shasta Daisies were planted in the flower beds, their long period of bloom being desirable. Note the weird effect of the canopy of one tree in the sky-line beyond the buildings. The peculiar fancy of the owner is exhibited by the thick planting.



Plate 149. A Formal Garden

A MODERN WATER GARDEN

This house faces the water and the view before us is that of the back yard. Near the house is a mixed border of shrubs; the beds on the left are Phlox and Shasta Daisy; on the right foreground is a bed of Pæonies. The large circular bed in the middle is a water garden containing white and yellow Water Lilies, Water Hyacinths and the beautiful Lotus. A border of Geranium and Funkia Undulata around the basin enhances the beauty of the scene.

Apropos of the Lotus I wish to remark that La Plaisance Bay, adjoining Greening's Big Nurseries, contains the largest Lotus beds in America. It is a most beautiful sight to see miles and miles of this magnificent flower standing two to three feet above the water, and thousands of people make a yearly pilgrimage to the Monroe Lotus Beds.

It has become a custom of many colleges, nature societies, literary societies, civic societies and others to visit the Lotus beds at least once each year. Their naturalization in the Monroe marshes is credited to Doctor Doersch, who brought the original stock from Egypt.



Plate 150. A Modern Water Garden



Plate 151. Fraternity House at the Greening Nurseries

FRATERNITY HOUSE AT THE GREENING NURSERIES

Where students of the Greening School of Horticulture and Landscape Art make their home during the summer.

A charming glen as you may see,
A shady grove of lofty trees
That spread their branches broad and free,
Gently waving with the breeze.

Where many schools from many states
Their students send, the art to woo
Of garden craft, which educates
And trains the boys to work and do.



Plate 152. Hardy Rhododendrons in Bloom

HARDY RHODODENDRONS IN BLOOM

This picture illustrates one of the best uses that can be made of the Rhododendron, which is to naturalize it in woods or on the hillside of woody dells where the deep peaty soil makes a congenial place for it. It is at home also in some half-shaded nook of the natural garden when good drainage and a cool bed of leaf-mold have been prepared for it. Covering completely with leaves gives an ample protection during winter. It is especially effective when combined with Ferns and Lilies, both luxuriating in the same cool, moist soil. In June the Lilies raise their stately forms above the Rhododendrons and add another octave of color to the grand chorus of flowers.

It is one of the beauties of flowers that they speak a universal language, and the little girl in the picture is conversing with them. They tell of peace and rest and love without alloy, make glad her heart till her little life is bejeweled with the gems of joy.

ONE OF THE COUNTRY HOMES OF
CHAS. E. GREENING

at the La Plaisance entrance to Greening's Big Nurseries.

Beneath the trees so beautiful,
In the blessed shrine of home,
So pure, so fair and cheerful there,
Our jewels here do roam.

The very air with odors rare
Their senses tease and please;
While flit of bird is ever heard,
And hum of happy bees.



Plate 153. One of the Country Homes of Charles E. Greening

ARTISTIC GARDEN VIEW

A very artistic effect is produced by planting perennial flowers in front of the shrubbery border. The shrubs give a nice setting to the flowers without cutting up the lawn with little detached beds, as was the custom some years ago. The above garden has a spirit of animation without being nervous and fidgety. The ground was well prepared before planting and the result is a sea of billowed bloom—Iris, Phlox, Delphinium, Gailardia, Hibiscus, Foxglove, Helianthus and Boltonia. Near the house are Lombardy Poplars, which are useful to produce certain architectural effects. A Tausendschön Rose is on the gate. At the base of the sun-dial is a colony of Euonymus Radicans. The large trees are Maples.

The sun-dial makes a very pretty addition to a garden. A small one on a columnar pedestal is appropriate for a formal garden, whilst a large base of field stones and a proportionately large gnomon and dial is suitable for placing near a driveway.



Plate 154. Artistic Garden View



Plate 155. A Field of Paeonies in Bloom at the Greening Nursery

A FIELD OF PÆONIES IN BLOOM AT THE GREENING NURSERY

This view shows a large field of Pæonies representing the choice of many hundred varieties collected in my journey abroad and from the best sources in this country. The picture was taken in bloom time and shows a sea of great floral beauty. Not the least attractive feature is the young lady—a daughter of the writer—accompanied by a little tot all in smiles.

The Pæonia is one of the most popular flowers by reason of its hardiness, beauty and ease of cultivation. It will grow anywhere with little care, or no care, and its glossy green foliage and compactness of growth make it very desirable for bedding or border work. It comes in a great variety of colors and large masses planted chromatically present a gorgeous scene beyond the power of words to express. No plant has received more attention at the hands of hybridists and it is destined to become the most popular perennial flower.



Plate 156. Hydrangea Arborescens (Hills of Snow)

HYDRANGEA ARBORESCENS (HILLS OF SNOW)

This is a new Hydrangea that begins blooming in July, a month earlier than the well-known *Paniculata Grandiflora*. The bloom is a pure white and the plant is perfectly hardy. Very suitable for mass planting.

I have had rather indifferent success with this variety so far, and yet I am loath to give it up. The duration of its bloom and its purity of color make it a valuable addition to our gardens. Its weakness has been that of making a rather spindling growth. My observations would indicate that it demands a well-enriched, sandy soil and plenty of water. It requires very close pruning in the spring. The name of this shrub illustrates the ease with which words become corrupted among illiterate people. Our colored brethren in the South and the class of whites known by them as "po' white trash," call it High Geranium, the lapse from Hydrangea being an easy transition for those who are not punctilious in such matters, especially when their garden experience is largely confined to the geranium, which they regard as the ne plus ultra of all growing things.

THE SHASTA DAISY

This is one of Luther Burbank's greatest triumphs. Under his management the little field daisy has evolved into a gorgeous flower, which is a very valuable addition to our gardens. The picture shows a large colony of them in bloom.

Mr. Burbank has produced many other plants of beauty and economic use, his methods being those of selection and studied cross-breeding; and perhaps it is not an unfair deduction to say that they are suggestive of the possibilities of eugenics or stirpiculture which, according to the preachments of modern sociologists, is the last message of hope for the human race.

It has got to be no trick at all to grow \$30,000-Carnations but, as Dr. Moras says in his last book, there is still an enormous output of 30-cent folks. When I was a boy a three-minute horse was a hummer, and I have lived long enough to see the advent of the two-minute horse; but we have not produced a Shakespeare since the year of grace 1564!



Plate 157. The Shasta Daisy

A PARK SCENE

This park scene shows a double reverse in the driveway, caused by following the contour of the hills. At the second bend in the road is a bed of Rosa Rugosa, used there to justify the curve. In the right foreground are Spiraea Van Houttei. The trees are Maples.

The straight line is not the line of beauty. All nature moves in curves. The orbits of all the planets are elliptical — it has been said by a wag that even a kiss is "a lip tickle." The trajectory course of a cannon-ball is parabolic. A worthy gentleman in Paris — and his name is Worth — has devoted his life to designing new curvilinear contraptions for the "female form divine," by which means he has alienated from the American pocketbook and appropriated unto himself a great many American dollars. And they were round. In fact, "money makes the world go round."



Plate 158. A Park Scene



Plate 159. An Esplanade

AN ESPLANADE

In rich residential districts the avenues are wide, as in this instance, where it is 125 feet, thus affording ample room for an esplanade in the middle and a narrow driveway on each side. The feature of this picture is the peculiar treatment of the esplanade, which is planted with *Magnolia Soulangeana*, the large foliage of which gives a tropical tone of luxuriance that is very agreeable. The trees on each side are American White Elm.

When, as is usually the case on such properties, the building restrictions require foundation walls to be laid 50 feet from the lot line, it makes a clear vantage of 225 feet from house to house. This is plenty of elbow-room for everybody, especially when we consider that the esplanade in the middle of the street is heavily planted.



Plate 160. A Lawn View

A LAWN VIEW

The strength of this picture lies in its open lawn and its magnificent background of shrubbery and trees. The low shrubs are *Berberis Thunbergii*. Back of them are *Spiræas*, *Deutzias* and *Syringas*, while in the far background are the Bush Honeysuckles, Lilacs and Sumacs. The tree in the foreground is a Norway Maple and the other an American White Elm. A glimpse of the house is caught through a rift in the foliage, and at the foot of the Maple are the table and chairs that tell of comradeship and outdoor enjoyment.

This is a delightful place to meet old chums, to read old books and old billet-doux, to dream old dreams and live again the days "When Knighthood was in Flower." Such scenes as these are common in Europe. Nearly all business men there find time for recreation, for an aftermath of joy with their friends, for the social amenities, for the exchange of courtesies, for a hearty hand-shake, for a restful siesta, for a period of play, for a stroll in the garden, and for a jovial song.

And who shall gainsay? Is it not better to forget the troubles of to-day and borrow sunshine of to-morrow? Comradeship! How sacred is that word!!

A FARMER'S HOME PATHWAY IN VEGETABLE GARDEN

The rapid increase of wealth and culture among farmers manifests itself in improved home surroundings. Here is a farmhouse fairly embowered with trees and flowers. To the right of the walk are the vegetables, in the foreground being the tomatoes trained on stakes. On the left are perennial flowers like Shasta Daisy, Phlox, Delphinium, Pyrethrum, Boltonia and Pæonies.

In every farm home, as in every city home, there is usually some member of the family who has a talent for growing flowers, just as others have a talent for music, or singing, or elocution; and this talent is as worthy of cultivation as any of the others. The flower girl does more to sweeten the joys of family life than any of her sisters.



Plate 161. A Farmer's Home. Pathway in Vegetable Garden

FROM SOMEWHERE TO SOMEWHERE

A pergola is not simply an arbor, nor is it simply a covered walk. It is a combination of both. In the language of railroad people an arbor is a terminal station and a pergola an important stopping-place along the line. And being along the line it is subject to the same rules that guide us in building walks—that is to say, it must lead somewhere: to some important garden feature like a formal garden, or to a junction in the walk system that opens at once into two or more pleasing surprises. Occasionally, as in this instance, it will serve the additional purpose of giving privacy to some quiet garden bower.

Note the hedge of California Privet between the columns. The vines are Ampelopsis Quinquefolia, Hall's Honeysuckle and Clematis Paniculata.

I illustrate on another page a detail drawing of a pergola which will show the manner of construction. Such a structure, being architectural, must harmonize with the architecture of the house.

When a new property is being developed it is best to call in the building architect and landscape architect at the same time, and let them advise together on the general style of treatment; but on an old property either one can design a suitable pergola. The construction is very simple. Any local carpenter can do the work. In some cases the columns are made of concrete at the place where they are to stand. Cement has come into such general use that nearly all mechanics understand how to mix it properly, while anyone with a little ingenuity can make the frames.



Plate 162. From Somewhere to Somewhere



Plate 163. Picturesque Arrangement for Auto-House and Drive

PICTURESQUE ARRANGEMENT FOR AUTO-HOUSE AND DRIVE

This is a very pictorial arrangement of a back yard. Heavy plantings of shrubbery form the border of the drive leading to the auto-house. The right-hand border consists of tall-growing shrubs like Syringas, Lilacs, Weigelias, and Flowering Thorns. The left-hand border of Spiræas, Barberries, and Hydrangeas. The road is macadam. Note the open lawn.

I give on another page full instructions for making macadam driveways, and I recommend their use on large properties. In making these it must be remembered that the ideal sought is to make them smooth and hard and impervious to water. In a good macadam roadbed the various sizes of crushed stone knit together and become thoroughly incorporated—that is to say, they are virtually a solid block of stone. The surface should be shaped so as to shed water.



Plate 164. An Ornamental Terrace

AN ORNAMENTAL TERRACE

This mansion stands on a small eminence which is terraced and reached by a flight of white marble steps. Naturally this terrace becomes a very important feature of the landscape, and it is treated somewhat after the nature of an open hearth. The shoulder of the terrace is decorated with a series of urns which, to a great extent, deceive the eye and make the terrace look much higher than it really is. A row of small globular evergreens would have the same effect and Thuya Globosa or Tom Thumb or Hoveyii are frequently used for that purpose. The latter has a beautiful golden color. The trees on the left of the terrace are Pines and Spruce. On the right are some Celastrus Scandens or Bittersweet vines clambering on some native thorns. Note the open lawn and beautiful sky-line of trees.

A very pretty way of treating a terrace is to make it an elevated garden, or what may be called a garden terrace. For a mansion of the highest class the best treatment is to build a retaining wall of material to harmonize with the house, laying the coping slightly above the terrace, and on the coping some nicely turned newel posts to support a balustrade or rail. Inside of this rail a formal hedge, properly trimmed, gives the proper garden finish, and then the area is laid out in formal beds. Hardy, free-blooming perennials are the best to use—such as dwarf Phlox, Sweet William, etc. The Baby Rambler is also a good bedder for this purpose.

GROUP OF ORNAMENTAL GRASSES

Ornamental grasses make fine subjects for the lawn, especially when planted in heavy masses. They are perfectly hardy and give beautiful subtropical effects. The Eulalias are the best.

There are three varieties of Eulalias which are worthy of a place in every garden. One is all green with the exception of the midribs, which are white. The blade is narrow and the pose of the grass is very graceful. It bears the rather imposing name of Eulalia Univittata Gracillima. Two other varieties have light yellow variegations, one lengthwise and the other crosswise. All these attain a height of 4 to 5 feet. A larger-growing grass is the Erianthus Ravenna. This grows to 10 or 12 feet, and has huge feathery plumes which make good winter indoor decorations. Of the smaller grasses for edging, the Ribbon Grass is the best.



Plate 165. Group of Ornamental Grasses

PERGOLA PERISTYLE

This is an unusual use of the Pergola, as it does not form a part of the walk system. It is more in the nature of a peristyle running from the library to the property line and separating the front yard from the tennis court at the rear. The hedge is of California Privet, with corner posts made out of clusters of the same plant. The vines are all Clematis Paniculata, intended for show effect rather than continuous effect. Observe that shrubs have been planted on the outside of the hedge to lessen the severely formal lines.

The reason why only one variety of vine is used for show effect is that the family is away most of the early summer, so that early bloom is not desired. When the family returns in July there are enough flowers to compensate for all they have missed in the early season.

A very good vine to use on a pergola is the American Woodbine, especially if we grow some climbing roses along with it. Some years ago Professor Hansen, of the South Dakota Experiment Station, while traveling in Europe in quest of horticultural information, was delightfully surprised to see this vine completely draping the pergola of a Russian prince—Prince A. W. Barjatinsky, 15 versts from Kolontajewska, in Southern Russia. From this it would seem that this vine is not without honor abroad.



Plate 166. Pergola Peristyle



Plate 167. Scene in Greening Park

SCENE IN GREENING PARK

Here a Norway Spruce hedge is used as a border for a driveway. In this case the trees were planted eighteen inches apart and sheared to straight lines, so the top is perfectly level and the sides a solid wall of green. The trees are Norway Maple, headed up to eight feet, with clean, straight trunks. The Norway is one of the slow-growing Maples, but it is a beautiful tree when developed.

It cannot be told too often that hedges accommodate themselves to many situations, and they always look well, even when there are no other floral ornaments on the grounds. They can be used on the street line, as in this case, or on the property line between adjoining lots. When a yard is divided into two or more garden units, hedges divide and frame up each one in a distinctive way. Low hedges are very pretty bordering the walks and drives. They give these entrances an impressive charm. And lastly, very low hedges can be used as an edging or coping for flower beds, as was a very common custom in early colonial days.



Plate 168. Evergreens Properly Trimmed for a Formal Garden

EVERGREENS PROPERLY TRIMMED FOR A FORMAL GARDEN

Most evergreens are very symmetrical in outline, and they make beautiful subjects for the formal garden. It is good practice to accentuate their formality by a little pruning, as in the above case, where the tops were cut off and all straggling branches shortened in. View in formal garden, Greening Park.

This is an application of the Greening method of formal pruning. In the same garden there are groups of shrubs of low, compact-growing varieties, and each group is sheared to formal lines to look like one huge bush. The particular portion of the garden in which they stand is laid out geometrically, and is separated by hedges from the natural garden. The walk system is of crushed stone.

The loose, open-growing evergreens, like Pines, Spruce and Firs, are not suitable for this kind of a garden; but the Cedars and Junipers make admirable specimens for formal effects.

BACK-YARD TREATMENT

This is the north side of Greening's Office Building. On account of the shade the shrubs near the house are *Symphoricarpos*, *Rubra* and *Berberis Thunbergii*. The clump of shrubs on the lower right-hand corner is a solid bed of the same *Berberis* trimmed compactly; those in the background are *Philadelphus Coronarius*, *Berberis Purpurea*, and *Spiraea Van Houttei*. The tree is a Silver Maple. Note the graceful curve of the walk.

The curves in this walk are sensible because they give sensible service. They are the most direct route to the various entrances; moreover, the street walks are near, and they are straight, as is also the short approach from them. In laying out walks it is well to keep in mind that curves are beautiful only as they are natural. Posing and artifice are just as vulgarly repulsive in a garden as in an individual. And, besides, a garden that is all curves is not restful: there is no place where the mind can rest. It is a fault which, in logic, is called "reasoning in a circle."



Plate 169. Back-Yard Treatment

A BED OF PAEONIES

This bed of Pæonies is on the edge of a woodlot in a deep, natural loamy soil, and its grand show of flowers is a sight to behold. The condition is that of seminaturalization, for the pæony must have some cultivation; but the point is that it gets along with very little care.

When established in good soil the pæonia will last a great many years—a generation or more. Fifty-eight years ago a lady now living on Lafayette avenue, Detroit, planted some pæonias which she had brought from her girlhood home and the plants are yet in full vigor. She is old and feeble now, but the "pinys" she planted in her youth enrich the evening of her life with all their wealth of bloom.

For over twenty years the Pæonia has been a neglected plant. Other oldtime favorites fared a similar fate. Gardeners have been looking for newer things, some of which were good; but new friends can never take the places of the old. And so it is that in our day there is a return to grandmother's favorites. The Pæonia is the first to gain renewed recognition. She is "the first fruits of them that slept."



Plate 170. A Bed of Paeonies



Plate 171. Lawn and Border Planting

LAWN AND BORDER PLANTING

"A Sylvan Scene—a woody theatre of stateliest view."—Milton

This is a sylvan scene of great beauty. The house stands on an elevation overlooking the lawn which, relatively speaking, is prairie-like in extent and on which the sunshine and the shadow chase each other in fitful play. It is well to remember that even the transient glories of the clouds enliven a landscape and, in regions where summer rains are common, their fleecy outlines make quick-moving pictures that are agreeable. Trees also give certain shadow effects that stand in relief and help to diversify the landscape. This fact will appeal more forcibly to architects, for they must take account of shadows in their compositions. The great charm of the Gothic Cathedrals of Italy lies in the transfigured shadows of their entrances.



Plate 172. Formal Garden

FORMAL GARDEN

A formal garden with very elaborate finish. It is an adjunct to a large and costly mansion and in perfect harmony with its surroundings. The walks are tiled and have a cement curb. There is a pergola in the left background with Trumpet Creeper and Dutchman's Pipe. The large formal tree to the right is a Rosemary Willow. The white flowering plants on the right of the walk are *Spiræa Van Houttei*, and the shrubs on the other side are *Weigelia*, which will bloom about a month later.

This garden is a typical representative of those seen surrounding the beautiful chateaux of France on the many noted chemins leading in all directions from Paris. And a beautiful fact connected with these gardens is that their owners are not stingy with the flowers. The giving of flowers is one of the common courtesies of France.

It is a custom which we would do well to follow in this country. It is a gracious thing to send flowers to our friends, especially to those who are denied outdoor pleasures—the shut-ins, the sick or otherwise unfortunate—who can see a garden only through the favor of their friends.

Nor should we forget the children of the poor. I do not expect nor want the rich families of America to convert their grounds into public play-gardens. Far from it. I have advocated throughout this book the building of hedges and walls to enclose their gardens for privacy's sake. But I want to make a plea for the little ones who do not know the smell of real fresh earth. Many of them do not know what flowers are. When you see a street-waif peering through the chinks in your garden wall, swing wide your gates and let the little fellow in. The real recipe for happiness is to make somebody else happy. Try it.

ENTRANCE GATE

This gateway makes a very imposing entrance to a gentleman's estate. It insures privacy and freedom from intrusion, at the same time that the whole property is given a dignified tone. It is treated architecturally with the lodge at the right of the entrance. The residence itself does not show in the picture. It is in the far background in the woods. On each side of the entrance is a Colorado Blue Spruce. Near each gate-post is a *Thuya Occidentalis*. There is a row of American White Elm on each side of the avenue leading to the residence. The posts are covered with *Ampelopsis Veitchii* climbers.



Plate 173. Entrance Gate

A DUTCH GARDEN

This subject is a Dutch garden, and is notable chiefly for the intensity of its effects. There is absolutely no lawn in it. It consists entirely of walks and flower-beds, and is correct where many cut-flowers are desired, and especially where the area is very limited. The garden of Paul de Longpré, in Pasadena, California, is of this type. As is well known, Mr. de Longpré is a famous painter of flower-forms.

In judging this garden we must remember that it is only the door-step, as it were, and that it is an annex of the house. There are acres of lawn in the natural garden beyond the balustrade.

A pleasing feature of this estate is the rolling character of the ground which is so pronounced as to make it virtually a two-story garden. The portion in the picture overlooks a deep valley, which is itself saturated with ravines and gullies. A number of little knolls are covered with trees.



Plate 174. A Dutch Garden



Plate 175. Evergreens for Cemeteries

EVERGREENS FOR CEMETERIES

Evergreens are good landscape material for cemeteries and gardens. They seem to diversify the scenery and possess much individual beauty. The above view consists of Dwarf Mugo Pine, Thuya Hoveyii, Thuya Siberica, Spruce, White Pine and Scotch Pine. The three slender trees in the distance are Thuya Pyramidalis.

There is an article on cemetery landscape gardening on page 25 which will well repay a careful reading. I have listed in that article a number of trees and shrubs suitable for that class of gardens, and I make a special appeal to cemetery boards for the adoption of softer tones in the decorative planting of burial lots.



Plate 176. A Novel Idea

A NOVEL IDEA

Galvanized iron pipe makes a light, airy, inconspicuous framework for a rose-arbor. The standards are set in cement, and wires are strung between them and over the top cross-bars. The chief merit of a frame of this kind is that it costs very little and it is almost invisible. A combination of vines and rose-bushes is best.

One of the finest effects of this class that I ever saw is in a small city in Minnesota. It is in a fine public park on the banks of the Mississippi. There is a pronounced declivity towards the water and the ground is terraced in formal lines. Some of the walks are covered with an arbor like this and the arbor itself has a canopy of the Ampelopsis Quinquefolia.

In the city of Munich, Germany, there is a very peculiar and fantastic use made of this distinctively American climbing vine. It is trained on chains. The chains are suspended between posts and the sprays hang in graceful festoons. There are many beautiful garden scenes around Munich, but few of them impressed me more than this simple use of the American Woodbine. As I looked upon the well-known vine it gave me a feeling of "home at last," like unto that experienced by the returning traveler when he sees again the folds of our sacred flag.

SCENE SHOWING EFFECT OF PLANTING SHRUBBERY BETWEEN SIDEWALK AND STREET

By the co-operation of all the residents of a street or block, the individual expense is light and the effect beautiful.

Another picture illustrating the idea is shown in Plate 89. It is taken from the author's own garden in the city of Monroe, Mich. Sheridan Drive in Chicago was made famous by this style of planting. As we drive along this beautiful avenue it gives us the impression of being on a gentleman's private estate rather than on a public thoroughfare. The charm is distinctive and gives the onlooker a feeling of individual ownership. This is a nice feeling to have.



Plate 177. Scene Showing Effect of Planting Shrubberty Between Sidewalk and Street

GRAPE VINES ON A PERGOLA

The grape vine makes long reaches of new wood every year and, with careful pruning it makes a thick growth that is very desirable for the wings and canopy of a pergola. The wild grape is especially fine for this purpose.

Among all the fruits that tempt the palate and tease the taste the grape takes high rank. It has become such a popular favorite that an amount almost inconceivable is consumed. And yet few people know what a really good grape is, unless they are so fortunate as to possess their own vines. Fermentation sets in so soon after being picked that the original purity is lost long before the fruit reaches the consumer.

Consider how easy it is to grow your own grapes. The vines accommodate themselves to the most scanty room. They may be trained on the fence or on the side of a building. The roots make their way amid rocks, under sidewalks, etc., so that there is no waste of space. Think, too, how beautiful is a grape-arbor, how delicious the aroma of the grape blossom, and how poetic are the "clustered spheres of wit and mirth." Nor must we forget the satisfaction that comes to the good housewife as she gathers her own grapes and with her own hand makes the wine, which like a blessed benediction annoints the soul with a thousand sweet delights.



Plate 178. Grape Vines on a Pergola

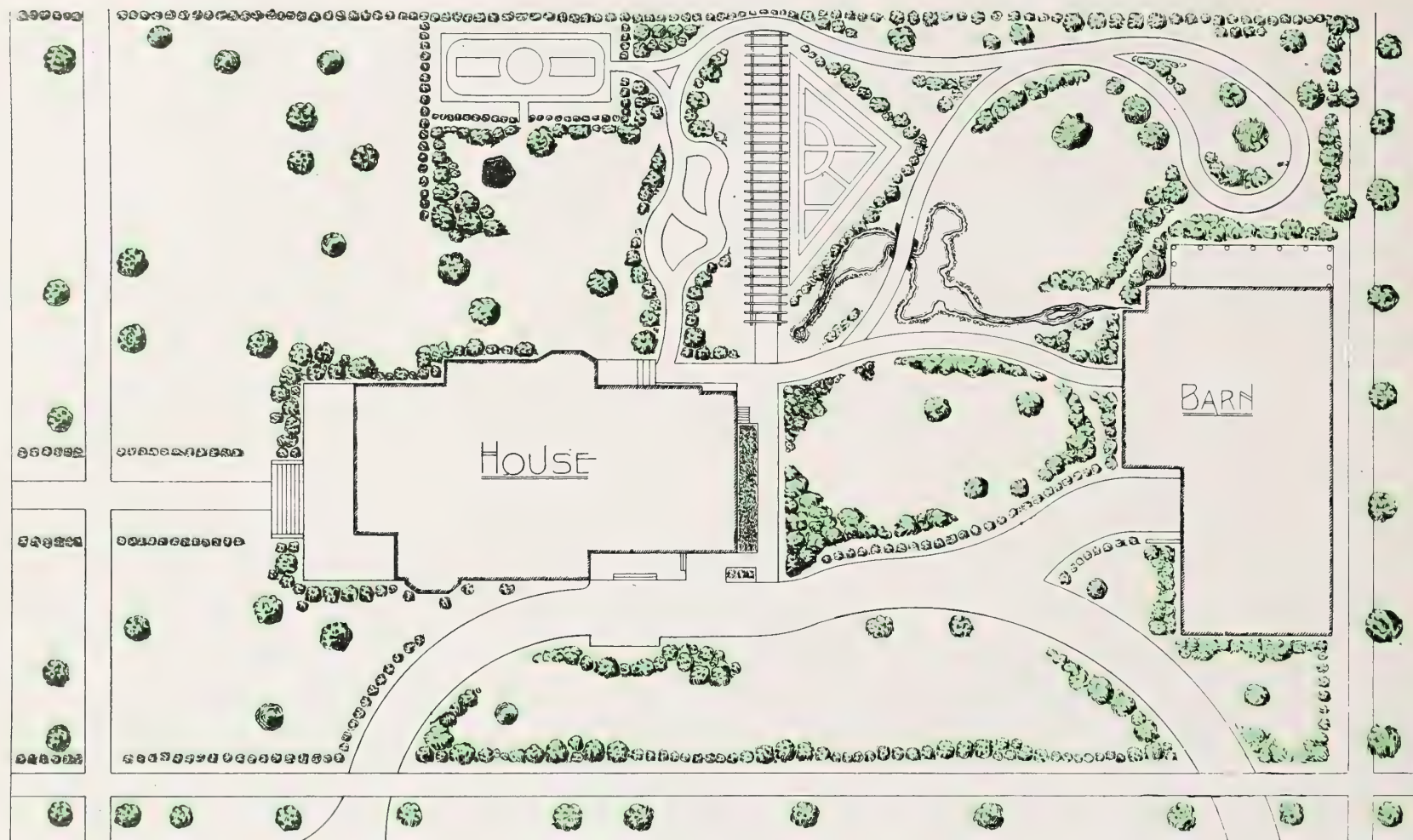


Plate 179

A JAPANESE GARDEN

In a level country a Japanese garden is very interesting. The senses become oppressed with the sameness of flatness, and the delicate art of manufacturing scenery diversifies the landscape by introducing miniature lakes, rivers, mountains, etc.; and the trees and shrubs are dwarfed by the Greening System of summer pruning to preserve a constructive ratio. Probably the most elaborate example of a Japanese garden in this country is that in Golden Gate Park, San Francisco. The above is a design by one of my assistants. It is built on ground that was level as a billiard table, but by framing it with shrubs and hedges the outside world was shut out and a little world of picturesque scenery was created within. There is a chain of lakes connected with narrow necks of water, one of which is crossed by a small bow-bridge; a floral rockery, covered with Alpine plants,

between the house and formal garden; a formal garden filled with roses and flowering plants; a pergola with Tuscan columns as shown on the opposite page; a vegetable garden masked with shrubs; a tea-house of rustic construction and furnished with tables and chairs of similar design; and a ravine running the full length of the yard. The water is supplied by tapping the water-pipe near the entrance to the pergola, where it feeds a fountain and cascades down to the lake. The overflow is conducted by a little stream to the barn sewer. The sidewalk approaching the house and the one from the house to the barn, are of cement; the rest of the walk system is of clay gravel as is also the carriage entrance. The shrubs are of hardy varieties and give a succession of bloom from earliest spring to late fall. Taken altogether this is a very satisfactory garden and it has been greatly enjoyed by its owner and his family.

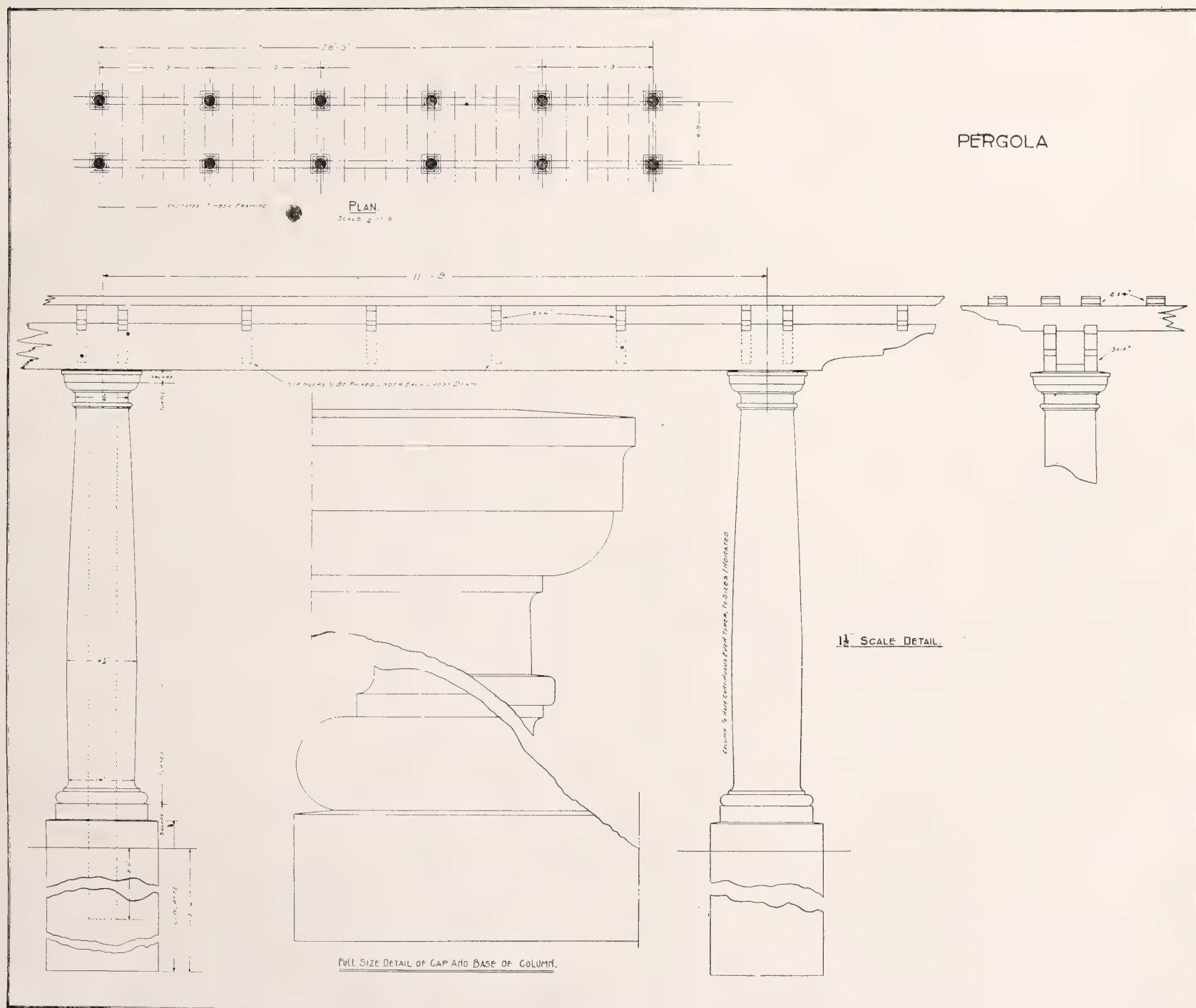


Plate 180

This pergola was erected in the Japanese garden shown on the preceding page. As it is near the house, which is semi-colonial, the columns are of Tuscan design, and the girders and trestle work have molded ends to harmonize with them. The columns rest on a concrete foundation, to

which they are anchored by iron bolts. Ornamental grasses, shrubs and pæonies are planted at its base. It leads from the house to an important juncture in the walk system, which opens at once into two major features of the yard. The scale of the drawing has been reduced.

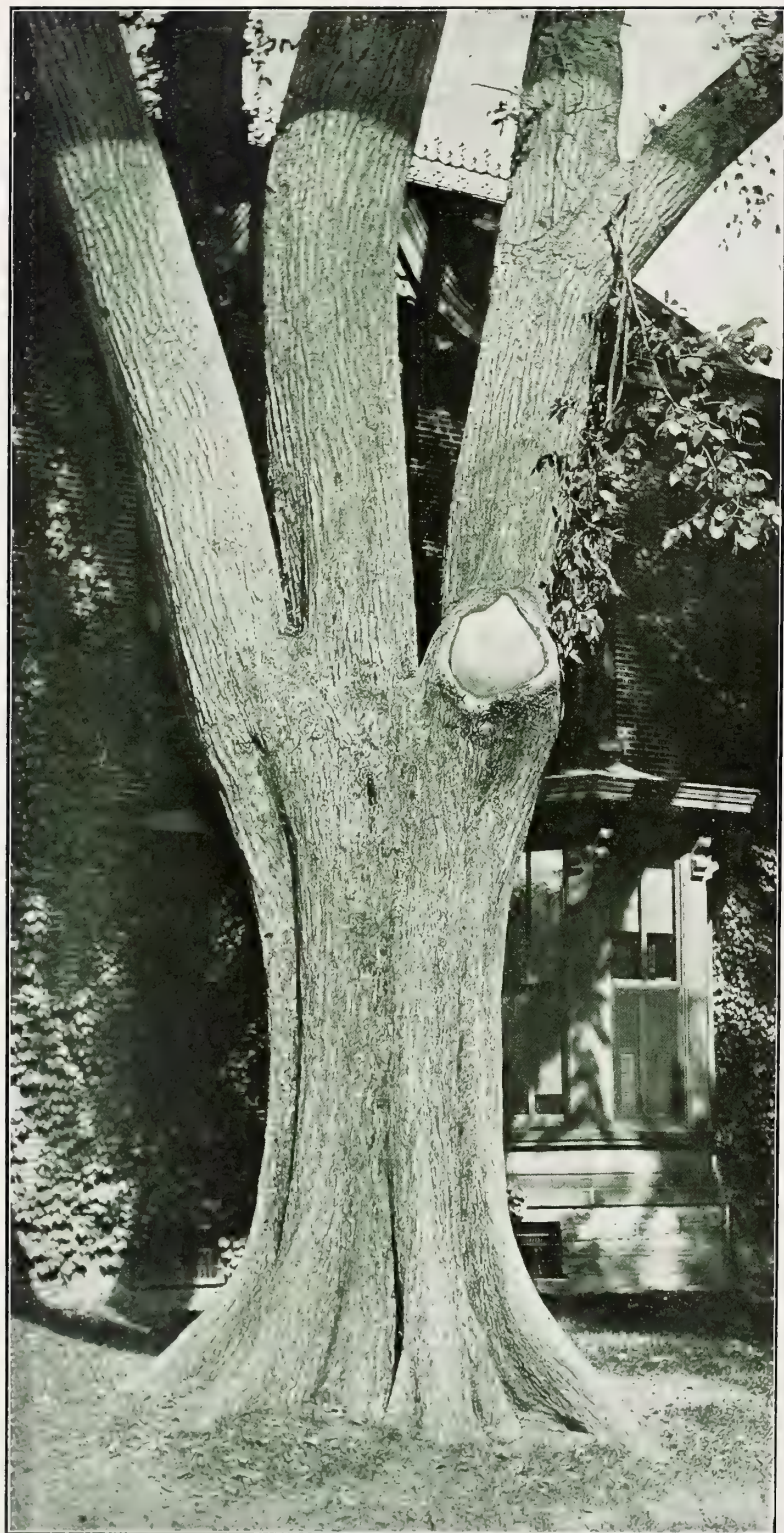


Plate 181

TREE SURGERY

A TREE in good thrift, like a person in good health, is practically immune from disease. Hence it is very important that the ground be kept in good mechanical and chemical condition to produce growth. Plant food must be added to the soil, preferably in the form of animal manure, and, in the case of prolonged drought, water must be supplied.

But in spite of all our care, trees sometime suffer severe mechanical injury, such as the breaking of limbs by windstorms, the rupturing of the bark by horses and, most of all, by improper pruning. No one should be permitted to prune trees who does not understand the aseptic cleansing of wounds caused by pruning and who cannot trace the circulation of the sap in the same sense that even children can trace the circulation of the blood. The fact remains, however, that much pruning is done by "tree butchers" and a great deal of mischief results therefrom.

To remedy this mischief requires considerable skill and a thorough knowledge of vegetable pathology. I have trained on my own private estate a number of bright young men in the science of tree surgery and the Greening Landscape Company is prepared to undertake the renovation of diseased trees.

The large cut on this page shows an instance where decay followed improper pruning. A long stub was left which naturally could not heal. The assimilated sap could not reach it and consequently no callus was formed over the wound. In the course of time the stub rotted away, the decay extending deeply into the heart of the tree. We removed all the dead tissue, and after making the cavity chemically clean it was filled with a cement preparation that is impervious to water. In a few years it will heal over and leave no trace of injury. The small cut shows the body of a maple tree that had received much abuse. Our treatment saved it and it is now in good thrift.

Owners of large estates and parks are invited to correspond with us.



Plate 182

MAKING LANDSCAPE PLANS

SOMETHING for nothing is worth the price—just that and no more. The most expensive things that we get are those that are exchanged for thanks. Modern business ethics are based on equity—value for value.

The making of an artistic landscape plan requires the expenditure of vital energy, of thought force, of mental caloric, of constructive skill, of synthetic talent, and of that strange unit we call love. A beautiful garden is born of love.

And so I do not pretend to make elaborate landscape plans for nothing. My staff of assistants comprises some of the very best garden artists in the world, and naturally I must pay them well, unlike many firms who employ boys and young academicians who need practice in drawing. My designers are thoroughly experienced—many of them gray-haired veterans—all have passed the academic stage; and they are not in competition with novices or inexperienced men in class B.

But that anyone who has a bona fide intention of improving his grounds may have the benefit of our services, we will make sketches of small properties for a nominal fee of five dollars the same to be refunded when the order for stock amounts to \$25.00

SPECIAL OFFER

or more. In the case of parks, cemeteries and large estates where the services of an engineer are required to take measurements and make topographical surveys, a moderate fee will be charged for that work. Our mapping department is fully equipped with every known engineering device for doing accurate work. On very rolling land, where grades must be adjusted for roadways and on comparatively level land, where a drainage system must be installed, their services are indispensable. Instruments of precision are very costly, and our outlay for this equipment represents a small fortune in itself; but large and complicated landscape propositions require their use for accurate operations. On one occasion we discovered a spring on land sufficiently elevated to give a gravity water service that was worth thousands of dollars to its owner.



Plate 183

Instructions for Measuring a Lot Intended for Landscape Improvement

The accuracy of our plan depends on information supplied.

Lot Measurement—Draw a sketch of lot on a large piece of blank paper, marking the exact size of the lot on all sides, and the directions north, south, east and west. Or better still, write for our profile sheet.

Street Measurement—Include in sketch width of sidewalk and street; also distance from sidewalk to street curb. Mark position of all shade trees in street.

Building Measurements—Draw a diagram of all buildings as accurately as possible, giving measurements in feet all around the building, also distances between cellar windows and doors. Give size of porches and steps, height of porch to ground; spaces between walks and buildings; exact distance from property line to buildings on all sides.

Walks and Drives—Give measurements of all walks and drives with distances to buildings and property line. State whether gravel, cement or wood.

Trees, Plants and Flower Beds—Mark position of all trees, groups of shrubs, vines, flower beds and hedges, etc., already existing on the property, giving size and variety as near as possible.

Front and Back Yard—Give depth of front and back yard from street; also dimensions of vegetable garden. State whether back yard is to be used for vegetables and fruit, or lawn, with trees and shrub border.

Please give information on the following.

Kind of soil—City or country—Private or public property—Fall or spring planting—Class of landscape work wanted, whether an elaborate job, complete in all respects, a medium-priced job, or one of very moderate cost—The amount you are willing to spend for a good job—Name, address and business.

Please give all information possible and make suggestions as to changes desired—especially regarding the style of garden that you like. Refer to plate numbers in this book.

A FACT TO REMEMBER

A MODERN house costs a great deal of money, and much of the cost is incurred for beauty's sake. And it is money well spent. It is human nature—and the best type of human nature—to like beautiful surroundings. A large portion of the expenditure on a house is devoted to the little graces of ornamentation that are the very yeast of life—a frieze here, a moulding there, a higher polish everywhere. These are the things that ennoble life, that give a sparkle to the eye and shape a smile upon the lip.

And yet many people who are very particular about the finish of a house and its interior appointments are utterly indifferent to the outlook from their windows. They spend, as a matter of course, considerable money for pictures to hang on their walls—usually of someone else's pictured home—never once thinking that a small investment will make a living picture of their own homes. And the amazing thing is that many otherwise progressive and well-intentioned people take that point of view.

As a matter of fact, one-half of the money we spend on our houses is for beauty. The other half would erect the same four warm walls and the same roof but without the Queen-Annie knickknacks of ornamentation. But we go further than this. We like to have beautiful walls and beautiful pictures on them. An earthen floor would do but we prefer polished hardwood. And all this art has come about because our souls can see; for art is but beauty seen with the eye of the soul. Those who see no beauty in anything have no soul.

At what point shall we cease our expenditures for beauty? Having spent 50 per cent. extra on the house itself, would an outlay of 5 per cent. on the grounds be extravagant?

And know you this, that the garden will grow into greater beauty and value year by year. It is the only investment that will continue to appreciate, whilst the house and all its appointments begin to wear away as soon as they are used. The same sun and the same rain that cause the house to deteriorate and finally disintegrate are the garden's dearest friends.



Plate 184

RESIDENCE OF PAUL DE LONGPRE

The World's Greatest Painter of Flower-Forms, Los Angeles, California

The architecture of Los Angeles—especially in the residence portion of the city—is picturesque, but with few exceptions not ostentatious. The most beautiful house is that of Paul de Longpré, the king of flower painters, as he has often been called. It is a Moorish villa, surrounded by a most beautiful garden. Mrs. John A. Logan, while attending the Congress of Mothers in California, visited this delightful spot, and pronounced it a veritable Garden of Eden. In his letter transmitting the above photograph to me, dated August 15, 1910, and written in French, Mr. de Longpré says:

"I send you the most recent photo taken of my garden, which is nearly three acres in extent, being 500 feet wide by 200 feet deep. The foreground is filled with white daisies and roses of every tint. Wishing you much success, I remain,"

*Sincerely yours
Paul de Longpré*

Detroit, Mich., August 23, 1910.

Dear Mr. Greening:—I want to write you a few words of appreciation for the landscape work you did for me last spring.

It has been a source of much pleasure to me to watch all season the wonderful growth and transformation of the bare ground about my home to a beautiful garden of flowers and shrubbery. I am glad also that I left the selection and planting entirely in your hands. It certainly reflects great credit on you and your firm. I shall always be an enthusiastic booster for you whenever I get the chance. William Born.

Landscape for Plan
HOUSE OF DAVID GARDEN OF EDEN
 GREENING NURSERY CO. BENTON HARBOR
 MONROE MICH MICH
 Landscape Architects Scale 1"=150'

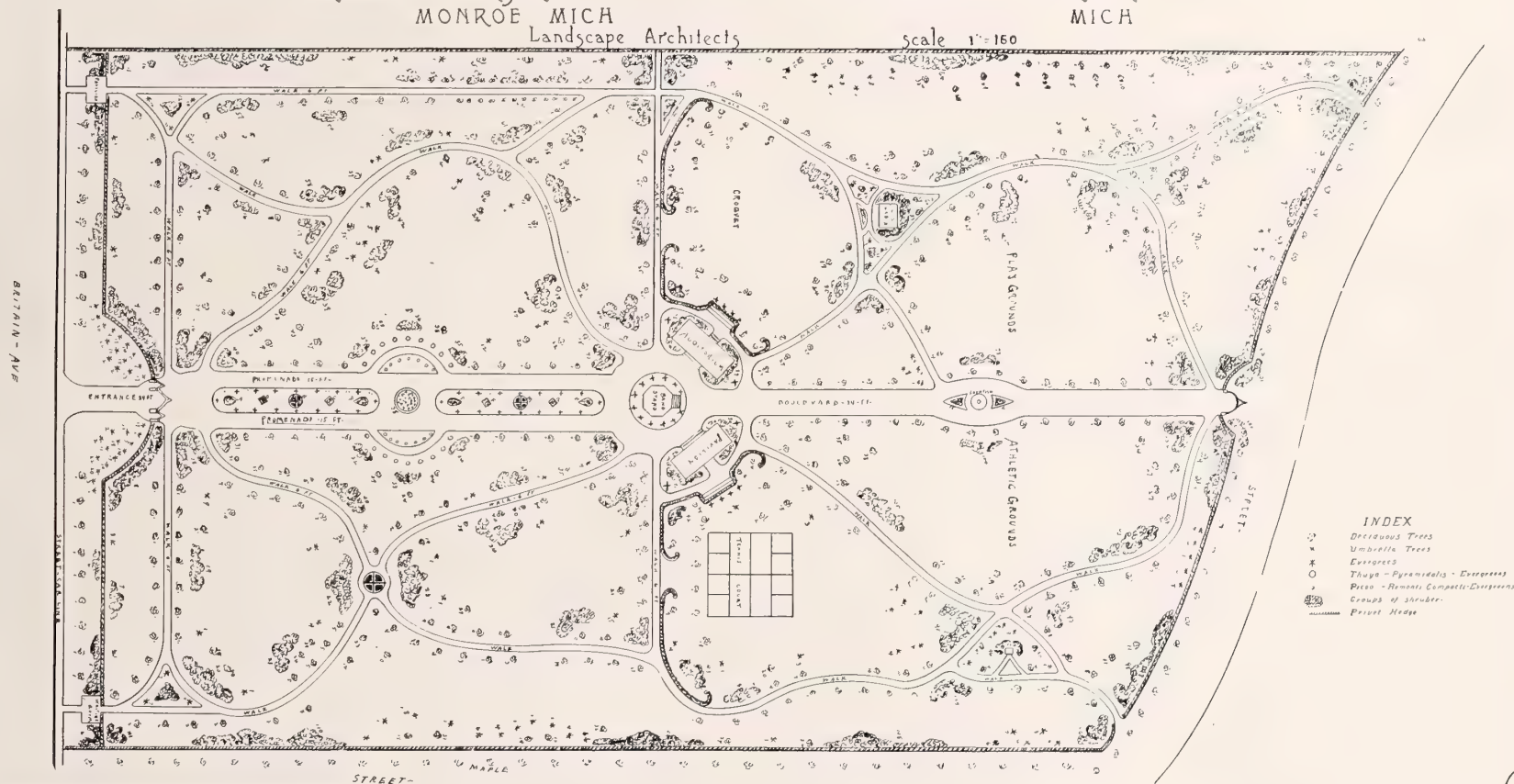


Plate 185

Designed and furnished by my company. Over 18,000 trees, roses, evergreens, shrubs and perennials were used in this park. The plan contains both formal and informal features, and the actual work of planting was done by the people themselves, a fact which testifies to the simplicity, fullness and accuracy of our detail drawings. Anyone can do his own planting from our working plans. We also give full instructions for maintenance.

Landscape Work Comprising over 20,000 Trees and Plants

Benton Harbor, Mich., June 27, 1908.

We are pleased to inform you that the plans and specifications furnished by you for our 25-acre House of David Park, also the nursery stock you furnished for same, have proven most satisfactory.

We appreciate the artistic effects of landscape architecture you have created on our grounds, and feel grateful for the care and attention you have given our work. Your comprehensive instructions, plans and specifications made it possible for us to do all our own planting without difficulty.

Yours truly,

Israelite House of David,
 Per M. S. Tyler, Pres.

Carey City Park Board Well Pleased

Carey, Ohio, May 25, 1909.

In compliance with your request as to how we are pleased with your nursery stock furnished for our waterworks park, and the manner in which the planting and platting was done, will say that we are highly pleased with it. The stock is all growing nicely. Your plat and planting was done in a workmanlike manner and we are perfectly satisfied.

The Board of Trustees of Public Affairs.

A. J. Frederick,
 Jacob Stief,
 E. D. Moore,

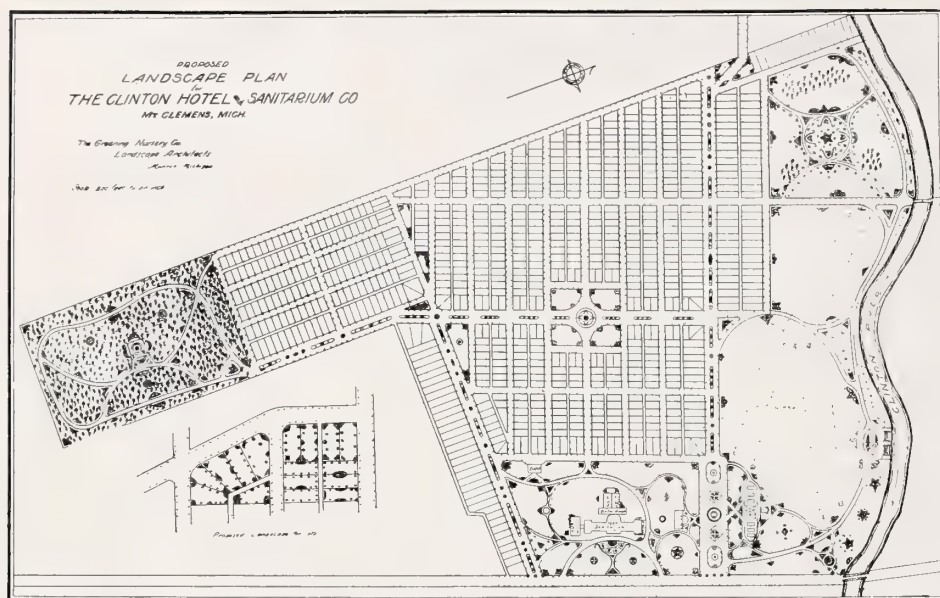


Plate 186. Air and Sun Cure

AIR AND SUN CURE

The accompanying plan contemplates the introduction of many European features, combining the merits of the great spas of Germany with those of the Mt. Clemens mineral baths. The property comprises 335 acres and gives ample room for golf links, river drive, park boulevard, athletic grounds, sun parlors, etc. Of late years it has come to be recognized that air and light are great healing agents and the grounds are planned for those who like outdoor life and who wish to participate in field sports—tennis, croquet, cricket, baseball, etc., whilst the long drives give ample opportunity for horse-back riding, automobiling, and the like. This project is still in the cocoon, awaiting funds to carry it out. My millionaire readers who wish to make an investment of this kind will please write for particulars.

My Garden is a Grand Success. You Deserve Great Credit

You will undoubtedly be glad to hear that my garden is a grand success. I congratulate myself for heeding your solicitation and for placing my contract with your firm. Now, after the work is completed, I can better appreciate your work and artistic ideas of landscape work. I can also see that it would have been a mistake for me to place the work in the hands of less experienced landscape architects who furnished my original plan. You deserve great credit for the careful study you are giving to aid those who would make their home grounds and gardens more beautiful.

Chas. W. Kuehl, Saginaw, Mich.

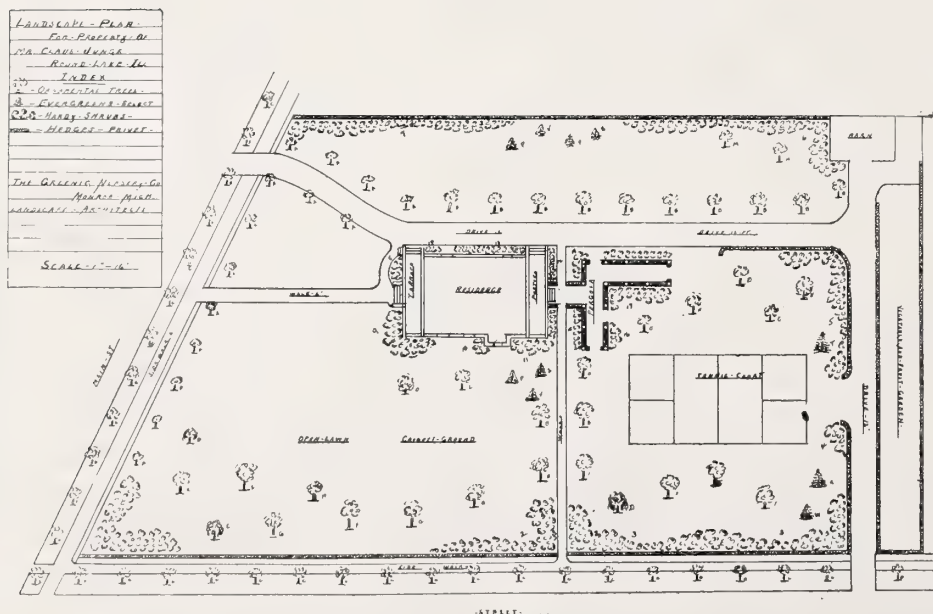


Plate 187. A Model Farmyard

A MODEL FARMYARD

A farmhouse should be separated from the fields. It always gives it an artistic finish to frame it up with hedges and soften the corners with groups of shrubs. The foundation walls of the buildings should also be toned down to a natural look by the use of shrubs. These things are just as necessary in the country as they are in the city; but on account of the natural features predominating to a great extent it gives a pleasing variety to prune many plants in formal shape. This property contains a tennis-court, which is simply outlined with lime on the grass. Tennis is a game in which the ladies can participate and it gives good enjoyment to the household. I do not recommend courts for city lots, however, as they encroach considerably on the lawn, at the same time that there is no real need for them. City people have tennis-courts at their country club.

A MODEL COUNTRY HOME ILLUSTRATING THE GREENING SYSTEM

This plan was made for Mr. John Gibson, secretary of the Western Michigan Development Bureau, and it worked out very satisfactorily. A hedge surrounds the entire yard and gives a beautiful effect from the outside. On the two sides and at the back there are composite groups of shrubs to frame up the lawn more artistically. The shrubbery details near the house and the little grove in the background are very pleasing, whilst bordering the walk and drive Maple-trees supply ample shade. In the far background is the old-fashioned flower garden with arches of rose-bushes over the entrances. The Michigan Agricultural College uses this plan for class instruction and recommends it as a model country home.

Out of Two Thousand, Less than Twenty-five Dead

Grosse Isle, Mich., May 27, 1909.

I hand you herewith my check for landscape work around my home, done last fall. In carefully looking over the trees and shrubbery you planted last fall, I am glad to report that all seem to be in healthy growing condition. Out of the 2,000 trees and plants I do not believe there are over twenty-five plants altogether that are not living. Altogether I am very well pleased with the work you have done for me and especially the way the things are starting to grow this spring notwithstanding the backward condition.

Yours very truly,

C. R. Cook.

FAMILY FRUIT GARDEN

Fruit is the elixir of life. It is a food fit for the gods. When Ponce de Leon made his famous quest in the Southland he was really looking for fruit! But he did not know that the best fruits are grown in the temperate zone. It is a scientific fact that the farther north a given fruit can be grown the better is its color and flavor—the Michigan apple, for instance. I believe that fruit growing, strictly followed according to the Greening System of Orcharding, is the best form of investment that can be made to-day. My booklet, "FORTUNE IN FRUIT FARMING" proves this beyond a doubt. Write for it. It is free.

But aside from growing fruit as a business proposition there is much pleasure and some profit in the family fruit garden. The accompanying plan shows a good assortment for a family. No. 1 represents a row of grape vines; No. 2, currant bushes; No. 3, gooseberries; No. 4, red raspberries; No. 5, black raspberries; No. 6, blackberries; No. 7, six miscellaneous fruit and nut trees, like Mulberry, Apricot, Japan Walnut, Burbank Plum, French Pear, and a budded Chestnut; No. 8, six Pear trees, No. 9, six Plum trees; No. 10, six Peach trees; No. 11, six Cherry trees. The four trees near the driveway leading to the garage are Apple trees.

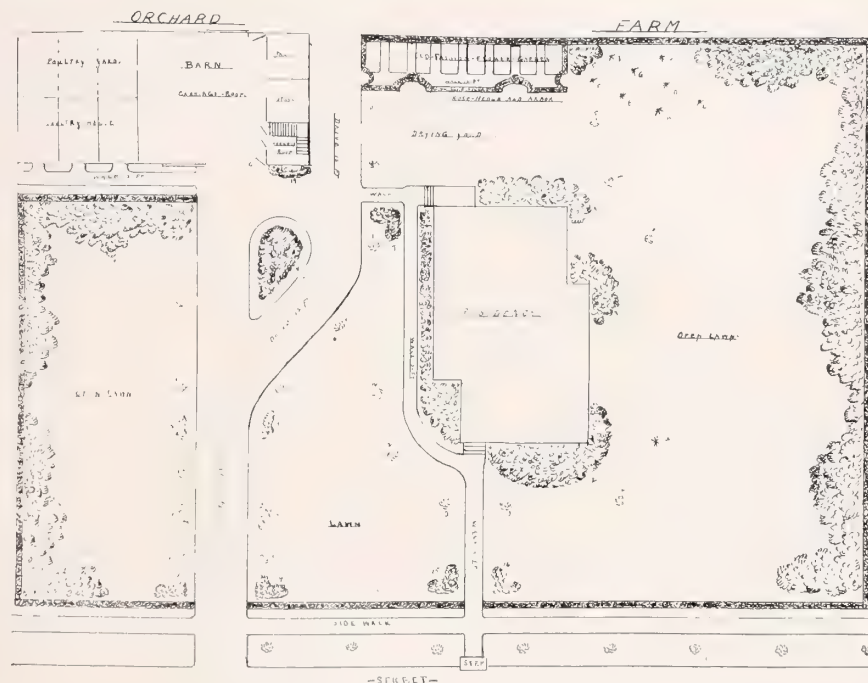


Plate 188. A Model Country Home

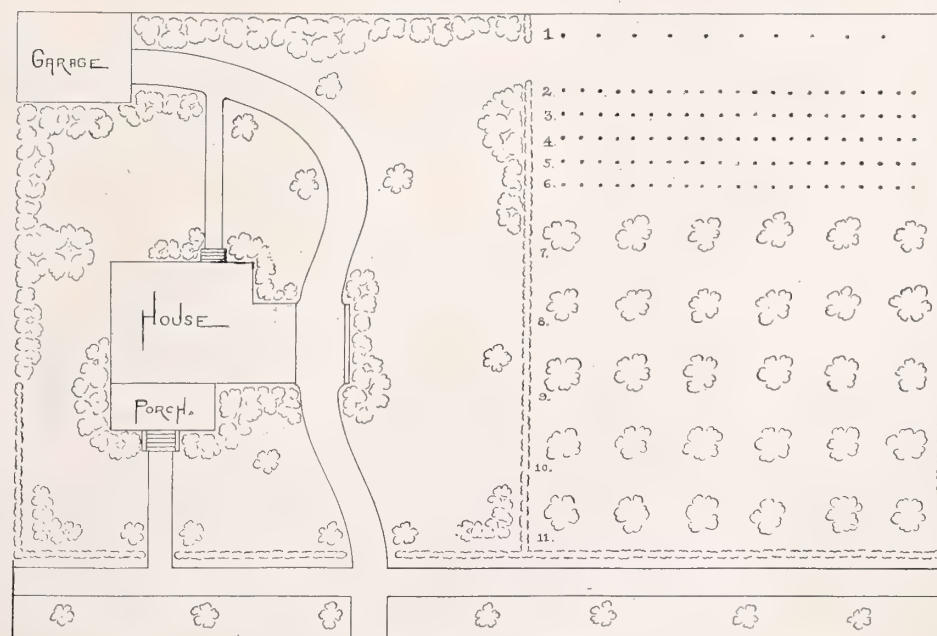


Plate 189. Family Fruit Garden

FORMULAS FOR DESTROYING INSECTS

INSECTS are of two kinds, those that chew the foliage and those that suck the sap with tube-like mouth parts. In general the former are destroyed by poisons, and the latter by caustics, such as kerosene or soap preparations. Some of the latter class can also be despatched by suffocation, either with gases or insect powders.

ANGLE WORMS.—Dissolve in one gallon of water a piece of lime the size of an egg. When settled draw off clear water from top and drench the soil with it.

APHIDES, PLANT LICE OR GREEN FLY.—This is a minute greenish insect that feeds on the tender part of plants. Remedies: heavy spraying with cold water; hot water about 125 degrees; whale oil soap emulsion; kerosene emulsion; tobacco water; tobacco dust; tobacco stems on ground in early spring; in window gardens, Persian insect powder; snuff.

SAN JOSE SCALE.—A scale insect, chiefly on succulent shoots of fruit trees, generally round, rarely elongated, 1-16 to 1-8 inches in diameter, grayish white in color, very dangerous. If tree is badly infected pull up and burn. If discovered early apply kerosene emulsion, or whale oil soap, 2 pounds to 1 gallon water. Be thorough in application. Later use lime-sulphur solution.

GIpsy-MOTH.—Came from Europe in 1869, and is very destructive to elms. So far confined mostly to Massachusetts, where enormous sums have been spent in combating it, but it is feared that it will become a serious general pest. Spray with arsenate of lead as soon as caterpillars hatch in the spring.

Sow BUG.—A dull brown bug about size and shape of coffee bean, prevalent in stiff soil and around and under decaying wood. Burrows in the ground to eat the succulent roots of plants. Indoor cultivators encircle their beds or benches with strips of about 40 parts sugar to one of Paris green. In the open, scrape some of the dirt away from the roots of plants attacked by these bugs and put in a handful or two of tobacco dust or soft coal soot, covering it over with earth.

TUSsock MoTH.—Larva is a bright yellow and red caterpillar with tufts of hair at both ends. Attacks shade trees, particularly horse-chestnuts, during June. The first brood spins cocoons, which mature early in July, and deposit glistening white, frothy masses of eggs. Most effective remedy is to spray with

arsenites early in June. This prevents the wingless females from entering the tree and laying eggs. Cocoons and eggs should be burned whenever found, but it is hard to find them all.

FUNGUS DISEASES.—The fungi which appear as spots on leaves, like blights and mildews, may be overcome by the application of fungicides, such as Bordeaux mixture, Eau Celeste, ammoniated copper, or lime-sulphur solution. Germ diseases of plants have no practical remedies. When such appear, as they very rarely do, the plants must be pulled up and burned. As Bordeaux mixture is in the nature of a whitewash, it discolors the foliage, consequently Eau Celeste, or lime-sulphur solution is often preferable.

KEROSENE EMULSION—HOW TO MAKE IT

Dissolve one-half pound of hard soap in one gallon of boiling water; remove from stove and add to this solution two gallons of kerosene, stirring it violently at the same time until it forms a creamy mass. The best way is to use a force pump with a rather small nozzle, and churn the substance back into the same vessel. It will thicken into a jelly-like substance on cooling and will keep indefinitely. This forms a stock solution that must be diluted before using. Use one part emulsion to fifteen parts of water.

ARSENITES—HOW TO MIX THEM

Arsenic is a stomach poison and is used against all insects that chew the foliage or young wood. Arsenate of lead is best. Mix one pound with 20 gallons of water. If Paris green or London purple is used, mix at the rate of one pound to 200 gallons of water.

CAUTION

Spraying does not mean sprinkling. To be effective the solutions must be applied in a fine fog-like spray. Use a powerful spray-pump fitted with a fine nozzle or atomizer.

GUARANTEE

The above formulas are guaranteed not to do any good if they are not applied. But they are effective when properly used.

The Greening System of Pruning Hardy Trees and Shrubs for Formal Effects

THIS idea came to me some years ago, whilst meditating in a contemplative mood on the marvelous achievements of the Japanese in dwarfing the maple and cherry trees by severe pruning, and the reflection was forced upon my mind that their great beauty and variety of foliage forms and colors were incidental results, all traceable to a fundamental law or fact in nature; so that my method may be said to be an American adaptation of the Japanese idea, but so far as its application to American conditions is concerned I was its first advocate in this country.

MY CLAIM IS TWO-FOLD My claim for it is two-fold. First, it enlarges the scope of formal effects; for by its use many shrubs that are naturally loose and open are made compact, and a group of them sheared to some regular outline is very effective in a formal garden. Also for street planting, or yards open to the street, where evergreens cannot be used on account of the injury they sustain from dogs, my system of pruning makes of ordinary shrubs a good substitute for the formal effects of evergreens. And, furthermore, in a small yard where the free and flowing lines of a natural garden are impracticable, and where the treatment is largely architectural, the foundation lines of a house may be treated in the same way and a beautiful banking of shrubs can be used, where a natural, untrimmed growth would look disheveled or out of place altogether. Thus it will be seen that in this respect alone my method increases by three-fold the practical uses of shrubs in American gardens.

My second claim is this: Ordinary winter pruning is merely corrective. Summer pruning is directive and formative. To deprive a tree or shrub of one-half its foliage in the early summer is the most severe disciplinary training to which it can be subjected; and the natural effort at readjustment of the sap pressure results in added beauties of color to the foliage and the formation of a greater amount of young lateral branches.

THE OBJECT OF SUMMER PRUNING The object then, of summer pruning is to make the shrubs grow into a solid mass, which harmonizes with the general scheme of a formal garden and the architectural lines of a small property, as well as to make a substi-



Plate 190

HOW TO PRUNE THE SILVER MAPLE

The Silver Maple is a very fast-growing tree, but as the wood is somewhat brash and liable to split, it should be headed back for several years after planting, by trimming off about a third of the previous year's growth. This makes a strong and compact crown. The pruning should be done the latter part of May or early June, when there will be no danger from bleeding. This pruning season applies to all Maples.

tute for evergreens where they are not practicable. As an incidental result the beauty of the foliage is increased and intensive color schemes are made possible.

Having in mind the securing of this compact form the shrubs should be cut low at the time of planting, at least to one-half their height. This forces them to form branches near the ground and thus keeps them dense and compact. In the spring of the second year all the leading branches should be cut back about one-third; and again in early June. This checks the upward growth and causes lateral branches to form, thus securing a compact hedge effect. During the third year the same idea should be carried



Plate 191. *Deutzia Gracilis* Showing Greening Method of Summer Pruning



Plate 192. The Greening Method of Pruning for Formal Effect

DEUTZIA GRACILIS

The *Deutzia Gracilis* is free-growing and stands trimming in formal shapes. This is a group of twenty plants in an oval bed and made compact and regular by shearing. The tree in the picture is a Camperdown Elm, which forms an umbrella-like top and makes a nice "playhouse" for children. This is a scene in Greening Park.

out with the addition of one or two extra prunings during the summer. By this time a very compact growth will have been secured which will not be difficult to maintain. If desired many beautiful color arrangements can be made, the colors to merge or be separated in terraces or steps. Summer pruning always gives better color to the foliage.

A SURVEY OF LIFE

If we take a broad survey of life we find that all nature is under the domain of the same law. In the oyster and mussel, pearls are formed as the result of irritation by a grain of sand, the exudation that forms a pearl being the effort of nature to correct abnormal conditions. Coconut pearls, found in Coconut trees in the Philippines, result from the trees being out of their normal condition. Flowers need to be crushed before they give forth all their perfume. Shelley says of some poets that they

"Are cradled into poetry by wrong;
They learn in suffering what they teach in song."

THE GREENING METHOD OF PRUNING FOR FORMAL EFFECT

Another view of the *Deutzia Gracilis* taken from the opposite direction, showing compact formal effect produced by the Greening method of pruning.

ATTRACTIVE FRONT LAWN TREATMENT

On small grounds it is impossible to grow large groups of shrubs in natural colonies, and a much better effect is obtained by close pruning to formal lines, conforming with but slightly modifying the lines of the house. This formal effect can be obtained only by the Greening method of spring and summer pruning. The above shows an avenue of medium-sized properties, all treated in the same way, and it has a peculiar nobility of tone that distinguishes it from the ordinary. Only two varieties of shrubs were used, *Spiræa Van Houttei* next to the house, planted two and one-half feet apart, and *Deutzia Gracilis* as a trimmer for the front border, planted two feet apart. *Berberis Thunbergii* may be used instead of the last named.



Plate 193. Attractive Front Lawn Treatment

It is said that the goldfinch sings the most sweetly when suffering physical pain and that the swan sings only once—just before dying; from which someone has made the lines,—

“Swans sing before they die: ’twere no bad thing
Did certain persons die before they sing.”

The beauty of color itself is but the interception and reflection of certain rays of light.

“From thwarted light leaps color’s flame.”
“The stream, impeded, breaks in song.”
“Obstruction is but Virtue’s foil.”

Beethoven said of Rossini that he had the talent in him to have become a great musician, if he had only been well disciplined when a boy; but he was spoiled by the easy abandon of a Bohemian life.

My system of summer pruning checks the Bohemian instincts of shrubs—keeps them within the bounds of good behavior—and disciplines them to their highest possibilities of beauty in form and color.

SHRUBBERY GROUP WITH COLOR EFFECT

This is a bed of hardy shrubs containing three distinct colors of foliage. The front row is *Corchorus*, variegated silver-leaf; the next *Golden Syringa*, a nice creamy mottled yellow; and the back row, *Deutzia Gracilis*, with green foliage. All three varieties blossom freely. This bed is in the writer’s own garden, at the entrance to Greening’s Big Nurseries. This formal effect is in good taste in the vicinity of buildings where the surroundings are strongly architectural, as in the present instance. The tree is a Norway Maple.

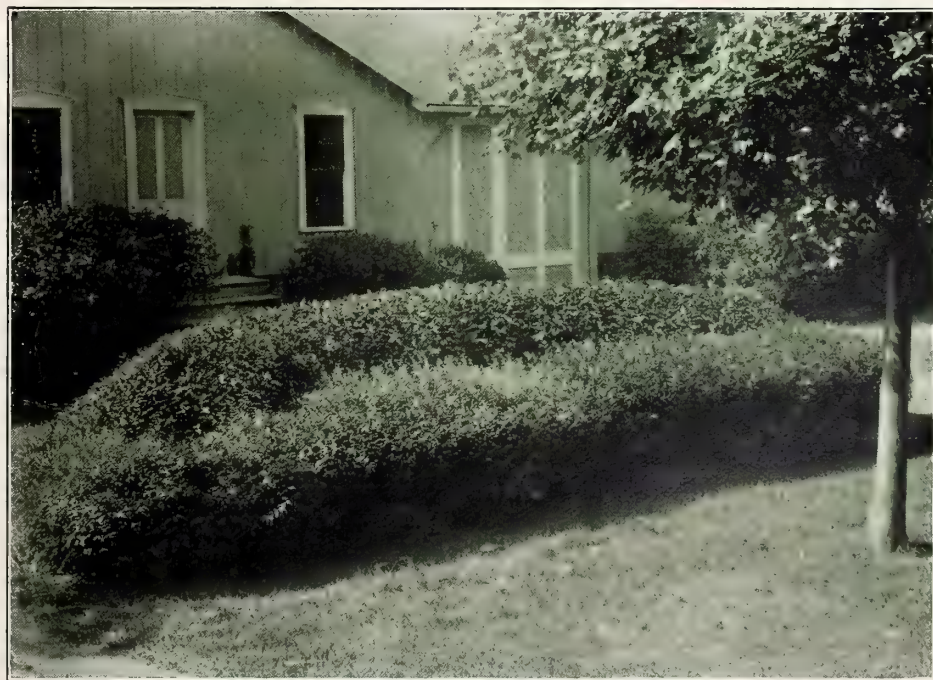


Plate 194. Shrubby Group with Color Effect



Plate 195. Strong Privet Hedge



Plate 196. A Banking of Red Snowberry to Soften the Architecture and Naturalize the House

STRONG PRIVET HEDGE

Here is illustrated a style of hedge formed by the Greening method of summer pruning. At certain fixed distances clusters of shrubs are planted and sheared like the head of a post. The Privet hedge plant is easily managed in this way, but the method is equally applicable to evergreen hedges, especially of the *Thuya Occidentalis*, also known as the American Arbor Vitæ. This is one of the best uses of the Greening method and, taken in connection with the five illustrations immediately preceding this, and the three immediately following, it gives a good idea of its various applications.

HOLY CROSS CEMETERY

Detroit, Mich., July 24, 1909.

Greening Landscape Co., Monroe, Mich.

Gentlemen:—It affords us great pleasure to inform you that the landscape work which your firm did for the Holy Cross Cemetery, in this city, about two and one-half years ago, is now showing the result of your artistic taste and conscientious labor in this line of work.

Up to this time the loss out of nearly 18,000 trees, shrubs and plants has been comparatively small, which we believe is due to the timely instructions given us as to care and pruning, these instructions and directions having been given without solicitation or charge.

We wish to thank you in particular for the personal interest taken by your Mr. Chas. Greening in making frequent visits to the cemetery for the purpose of personally seeing to it that the trees and plants received proper treatment.

The planting and landscape work of our cemetery was left in your charge to do as you thought best, and the ground committee to whom your proposed plans were submitted recommended the acceptance of same, and we are glad to say that the part of the work done by your company has produced results equal to if not beyond our expectations. We believe that as the years roll by, and the natural growth which is bound to take place in the trees and shrubs planted, they will afford and furnish full testimony of the wisdom and the artistic manner in which you have planned the grounds which at the time of planting were rough and unsightly. Thus you have by such planting laid the foundation for a beautiful and pleasing scene of luxuriant verdure and color blending.

Very truly yours,

Fred J. B. Sevald,
Secretary and Treasurer.

A BANKING OF RED SNOWBERRY TO SOFTEN THE ARCHITECTURE AND NATURALIZE THE HOUSE

This is a banking of Red Snowberry planted 30 inches apart on the north side of a house. This shrub has a graceful drooping habit and has ropes of red berries in the fall and winter. It does well in the shade and is well adapted for banking.

FORMAL GROUP SHOWING FINE COLOR EFFECT

The umbrella-shaped tree is a *Catalpa Bungei* or Umbrella-Tree. Planted on each side of a walk or driveway it gives a dignified and stately tone to an approach. The oval group of shrubs is very attractive in that location. It contains three distinct and pronounced colors of foliage. The middle section is *Symphoricarpos Rubra*, commonly called Indian Currant. This has green foliage. At one end is a colony of Purple Barberry, with an intense coppery tinge of purple; at the other end is a group of Golden-leaved *Syringa*. To obtain this effect, summer pruning is necessary.

BOARD OF EDUCATION

Hillsdale, Mich., August 23, 1910.

Mr. Chas. E. Greening, Monroe, Mich.

Dear Sir:—The trees and shrubs you planted for us in November, 1909, are doing nicely, and although we expected to get but little good out of them the first year, yet the places where they have been planted are the beauty spots of the town, and the elegant appearance of the school grounds has attracted the attention of nearly every stranger who comes here. I would not have thought it possible to make such a change in the appearance of school grounds as has been accomplished in the past year.

Another thing that has been especially noticeable is the fact that at all the buildings the pupils have shown a pride in the appearances of the grounds and instead of being destructive, as we feared, they have rather aided in keeping the grounds in a neat condition.

The teachers find the combination of shrubs a help in their Nature studies. As you know we have a course in Agriculture, and the instructor has used the shrubs to furnish examples in layering and other things relating to the technique of plant growth, and to illustrate the value of insecticides and the use of sprays.

This being a town which has no public parks, the town itself being a park, the school grounds have been parks and all during the vacation weeks there are lots of visitors who show the greatest interest in the beautifying of the grounds, although not otherwise interested in the schools.

Taking it all-in-all, I think it was one of the best investments we ever made when we got you to make out a plan for beautifying the school grounds, as the beauty grows from year to year, and by having a plan for the work it make no difference whether the membership of the board changes every year or not. The work can be continued each year, or, if circumstances require, some work can be done one year and continued after a lapse of several years, as your way of doing the work by groups makes it possible to do a little at a time and always have something that shows up well.

Very truly yours

Bion Whelan,
Secretary Board of Education.

SHADY CORNER NEAR FRONT PORCH

In this instance a happy combination of colors was obtained by using *Corchorus Variegated*, a low-growing silver-leaved shrub, for the first row, and *Philadelphus Aurea*, a golden-leaved shrub of medium growth, for the back row near the porch. The effect illustrated is gained by the Greening method of summer pruning.



Plate 197. Formal Group Showing Fine Color Effect



Plate 198. Shady Corner Near Front Porch



Plate 199

AN IMPROVED FARM HOME

This cut shows the scenic beauty of a country place developed artistically. It will be seen that large areas of well-kept lawn invite the eye in every direction, and trees and flowering shrubs—the happy home of birds—create a picture as quiet and restful as a mother's croon—a lullaby for tired souls.

Fig. 1 shows boundary planting to shut out neighboring buildings; Fig. 2, a geyser fountain at the back of the house; Fig. 3, the stable and its screen of trees and flowers; Fig. 4, the residence with open lawn; Fig. 5, the tool-house surrounded with shrubs; Figs. 6, 7, 8, and 9 are good examples of massing and border planting of shrubbery.

I INVITE

I INVITE anyone who loves trees and plants—and I hope that includes everybody—to visit my gardens and the Greening Nurseries.

I INVITE, especially, students from the Agricultural Colleges to come and study with me “Nature’s infinite book of secrecy,” and mayhap we shall solve some of her mysteries.

I INVITE the superintendents of parks and cemeteries who, above all men, are interested in landscape design and construction, to come and sit in the shade of my trees, and command my personal services, or those of my able assistants, for any information they may desire.

I INVITE park and cemetery commissioners to come on a junket to Greening’s Big Nurseries and learn all about the Greening methods of soil renovation and plant propagation, and I guarantee they will gather many ideas that will benefit them in their work. I do not like the use of the word junket, but it will have to do until Fra Elbertus coins one to take its place. Its original meaning has been perverted to such a degree by the abuse of its privileges that, at present, it has a savor of champagne, jack-pots and chorus-girls. For instance it is not unusual for the park commission of a small city to go on a junket to a big city to get information on the construction and management of public playgrounds, and after counting the teeth of the ostrich in the park and seeing the sights under the guidance and chaperonage of a “good fellow,” the members return home looking wise as owls. At the same time they neglect to visit the nursery, which is the very source and fountain-head of all park improvements.

I INVITE the council members of towns and villages that have no park boards to come and spend a day with me, or to appoint a delegation to do so, and I guarantee they will find it a day well spent.

I INVITE farmers who wish to beautify their home grounds or set out large orchards to make a pilgrimage to Monroe and attend some of the Greening lectures on soil renovation, art gardening and plant propagation.

I INVITE superintendents of schools and other educators who wish to add botanical gardens to their teaching helps and to beautify their school grounds to come and spend a day with me and learn in detail what educators of the old world have accomplished in this line of study, and how the same results may be



Plate 200

ORNAMENTAL PRIVET ARCH

This is an entrance to a formal garden, but the feature of the picture is the rustic gate and arch of Privet. The plants near the gate were permitted to grow tall and their tops “plashed” in the same way that farm hedges are “plashed” to produce a dense growth. This is a very unusual use of the method, but it shows the possibilities of Privet as a hedge plant.

attained in America. European gardeners are always in demand; why not produce men of equal proficiency in this country?

I INVITE the owners of large estates whose interest in trees is of the æsthetic kind to visit my grounds and study the wonderful color harmonies that exist in the flowers and foliage of trees and shrubs; and to learn the infinite variety of hardy plants that winter outdoors without harm, and make permanent gardens.

I INVITE automobile tourists, as they journey through the country, to take a spin through my grounds and relieve the tedium of travel by a study of flowers that will benefit them when they return home.

I INVITE all lovers of the beautiful—the genial comrades of nature—all those whose souls have wings, and who can soar to the heights of ecstasy—to come and take with me a walk afield and learn from nature’s lips the chemistry of colors and the formula of flowers!

Ornamental Trees for Avenues, Parks and Gardens

AS frequent reference has been made throughout this book to many varieties of trees, shrubs, roses, etc., a full description of them will be of great service to the reader in making his planting-list. The varieties herein described are fairly representative of the growing stock at the Greening Nurseries, which is not intended as a botanical museum of all known plants, but rather as a comprehensive list of all that are dependable. By the exercise of much care we have selected only the varieties that are best fitted to thrive in the severe climatic conditions of the Middle West and North Central States.

Upright Deciduous Trees

This class includes all shade and ornamental trees that shed their leaves in the fall.

ACER—MAPLE

Trees of this group are hardy, vigorous, adaptable to many soils, free from diseases, easily transplanted, regular in outline and beautiful in leaf. Nearly all are brilliantly colored in fall, especially the North American species.

Campestre (European Cork Maple)—Rather a small tree, with dark, dull green leaves, fading to brown and yellow. Has corky ridges on the branches. Very interesting when grown as a large shrub.

Dasycarpum (Silver Maple)—Of quicker growth than most trees, and valuable where immediate shade is required. Forms a large spreading head; the fine leaves are silvery beneath. Grows over 100 feet high.

Var. Wieri laciniatum (Wier's Cut-leaved Silver Maple)—A very beautiful specimen tree, with delicately cut leaves and distinct, half-drooping habit. The leader grows rapidly upright, the slender lateral branches curve gracefully downward. Of noble proportions when undisturbed, yet patient under considerable pruning.

Pseudo-platanus (European Sycamore Maple)—A broad, handsome tree of medium size, rarely over 60 feet high, with larger, darker leaves than other Maples. Casts a dense, cool shade.

Saccharum (Sugar or Rock Maple)—This tree is chieftain of its kind, straight, spreading, symmetrical, of grand proportions, often 120 feet in height; and longer-lived than most men who plant it. It grows well in all except damp, soggy soils, and roots deeply, allowing the grass to grow closely about its trunk. Its leaves have very rich autumn tints of clear yellow and scarlet.



ACER SACCHARUM (Sugar Maple)

Negundo (Ash-leaved Maple; Box Elder)—This species is easily distinguished by its pinnate leaves and greenish yellow bark. It grows rapidly into a large, spreading tree, 70 feet high, found valuable for planting timber claims, shelter-belts, etc., in the West, where it endures both drought and cold.

Platanoides (Norway Maple)—A handsome tree, of large, fairly rapid growth, 80 to 100 feet, forming a dense, rounded head, of strong branches and broad, deep green leaves. Sturdy, compact, vigorous, it is one of the very best trees for lawns, parks and gardens.

Schwedleri—The Purple Norway Maple's beautiful leaves attract attention at all seasons, but are especially fine in spring, when their gleaming

red and purple contrasts brightly with the delicate green of other trees. In midsummer they are purplish green, in autumn golden yellow. Grows to 80 feet.

Polymorphum (Japanese Maples)—These are the most delicately beautiful of small exotic trees. The more vigorous types like *Atropurpureum*, *Dissectum* and *Ornatum*, are hardy even in New England; the variegated types are only variably hardy. In some varieties the leaves are exquisitely cut and bright-colored only in spring and fall; others are deep blood-red or golden yellow all the season.

AESCULUS (Horse-Chestnut)

Hippocastanum (European White-Flowering Horse-Chestnut)—A large tree, 40 to 60 feet tall, of regular outline, spangled in May with great upright spikes of white and red flowers. Has no superior as a specimen flowering tree.

Rubicunda (Red Flowering Horse-Chestnut)—A somewhat smaller tree, rarely over 30 feet, with darker leaves and splendid flower-spikes opening a little later. Fine for contrasting with the white-flowered.

AILANTUS

(Celestial Tree—Tree of Heaven)

Glandulosa—An extremely quick-growing tree; 60 feet tall and tropical looking, with pinnate, palm-like leaves. Valuable because it thrives in smoky cities and in soils where other trees perish.

ALNUS (Alder)

Glutinosa (European, or Common Alder)—Foliage roundish, wedge-shaped, wavy. Remarkably quick in growth; 30 to 60 feet high.

Laciniata Imperialis (Imperial Cut-leaved Alder)—Of stately, graceful habit, 30 to 60 feet high, with large and deep-cut foliage. Vigorous and perfectly hardy. A grand lawn tree.

ARALIA (Angelica Tree)

Spinosa (Hercules' Club)—A showy native, with broad, handsomely cut leaves and huge clusters of small white flowers in July. Its winter effect is unique and handsome. Grows to 30 or 40 feet high.

BETULA (Birch)

Alba (European White Birch)—This is the famous Birch of literature, poetically called "The Lady of the Woods," growing sometimes 80 feet high. Quite erect when young, its branches begin to droop gracefully with age. Its bark is snow-white, and very effective in landscape views, especially if grown in front of a background of dark evergreens.

Var. atropurpurea (Purple Birch)—A handsome, white-barked tree, growing 50 to 80 feet high, with dark purple leaves which contrast beautifully with the bark.

CATALPA

Bungei (Chinese Catalpa)—A curious dwarf catalpa. It is very useful in formal work when grafted on stems of the Catalpa Speciosa, forming a pretty, dome-shaped head 10 to 12 feet high, of great, soft, heavy leaves. The flowers are borne in large clusters a foot long; the leaves are laid with shingle-like precision. Hardy, strong-growing, unique.

Speciosa (Western Catalpa)—A fine hardy sort, well adapted for forest and ornamental planting. The coarse-grained, soft wood is very durable and useful for railroad ties, fence-posts, etc. Blooms earlier than the others and grows to be a large tree 100 feet high. In late summer, its great crop of long, narrow "beans" is very effective.

CELTIS (Hackberry, Nettle Tree)

Occidentalis—A rare native tree that deserves much more general planting. It grows 100 to 120 feet high and its light green leaves are glossy, pointed, almost entirely free from insects; the branches spread horizontally, forming a wide, elm-shaped head of medium size. Vigorous, hardy and healthy, thriving in all soils.

Var. pumila—A dwarf form, rarely over 30 feet tall, and with smaller leaves. Sometimes more desirable by reason of its height.

CERASUS (Cherry)

Avium, alba flore pleno (Double White-flowering Cherry)—A charming small tree, 20 feet high, with branches completely hidden by a mass of large double white flowers in May.

CERCIS (Red Bud, Judas Tree)

Canadensis—The hardiest and, perhaps, the finest species of a handsome group of early and profuse-flowering trees. Medium height, 20 to 30 feet, forming a broad, irregular head of glossy, heart-shaped leaves that color pure yellow in fall. It blooms in earliest spring, with the dogwoods and magnolias, and is valuable for grouping with them.

CORNUS (Dogwood)

Florida (White-flowering Dogwood)—The great white flowers are 3 inches and more in width, lasting in favorable weather for as many weeks. Besides the fine characteristics given above, the bright red bark on its young growths makes it attractive and cheery in winter. Tree rarely grows over 20 feet in height and is branching in habit. Blooms when small.

CRATAEGUS (Flowering Thorn)

A low, dense, neat habit of the thorns adapts them for planting in small yards and for grouping anywhere. Are very hardy and grow well in all dry soils. The foliage is varied, always attractive, handsome and almost evergreen in some cases; the flowers are showy and abundant, often quite fragrant; the fruits are retained long in some species, are so thick as to burden the branches and frequently of bright colors. Their foliage colors brilliantly in fall.

Crus-galli (Cockspur Thorn)—A dwarf tree, rarely over 20 feet high, with widely extending horizontal branches, giving it a flat-topped effect. The leaves are thick, glossy, coloring to rich orange and scarlet in fall; flowers profuse, white with tinge of red, opening in May; fruits showy scarlet, persistent until spring.

Oxyacantha, alba flore pleno (Double White Thorn)—When in bloom a mass of clustered double rose-like white blossoms. This is the famous May thorn of English gardens, not often over 10 feet in height, with spreading branches and stout spines. Very handsome.

Coccinea flore pleno (Paul's Double Scarlet Thorn)—Of quick growth, showy, new and perhaps the best sort. The large perfectly double flowers are a rich glowing crimson.

Rosea flore pleno (Double Pink Hawthorn)—Has the English Hawthorn's fine habit and fragrance. Pretty rose-colored blooms.

CYTISUS

Laburnum (Golden Chain or Bean Tree)—This charming small tree, which rarely grows over 20 feet tall, takes its familiar name from the long racemes of golden yellow flowers with which it is radiant in June. It is picturesquely irregular in growth and has glossy pinnate leaves. Prefers a somewhat sheltered situation.

FAGUS (Beech)

Ferruginea (American Beech)—Our noble forest tree, growing to 80 feet, with silvery bark; fine spreading growth and symmetrically rounded head. Especially attractive in spring with the tender, delicate green of its leaves and pendent flowers. Pure yellow in fall.

Purpurea (Purple or Copper Beech)—A vigorous, elegant tree, reaching 50 to 80 ft. in height, with foliage changing from deep purple in spring, through crimson in summer, to purplish green in fall. Hardy, long-lived, free from insect pests, useful for specimens or grouping.

Var. Purpurea Riversi (Rivers' Blood-leaved Beech)—Where a large tree with purple foliage is wanted, nothing equals this. It is generally conceded to be the finest of all purple-leaved trees. Though it varies in intensity of color, from early spring until late fall the leaves are always a rich shade. Grows 50 to 80 feet high.

FRAXINUS (Ash)

Americana (American White Ash)—Our forest tree, tallest of the species, growing to 120 feet high, with straight, clean trunk, smooth, gray bark and glossy leaves. Useful for parks and streets. See page 86 for a good street view.

GLEDITSCHIA (Honey Locust)

Tricantha (Three-Thorned Honey Locust)—A large, vigorous tree, over 100 ft. high, with wide-spreading branches, feathery fern-like leaves, and a stout armament of thorns. Makes a fine defensive hedge. Bears long, pendent seed-pods, which, when slightly twisted, give forth their sweetish juice. It is greatly relished by country children.

GYMNOCLADUS

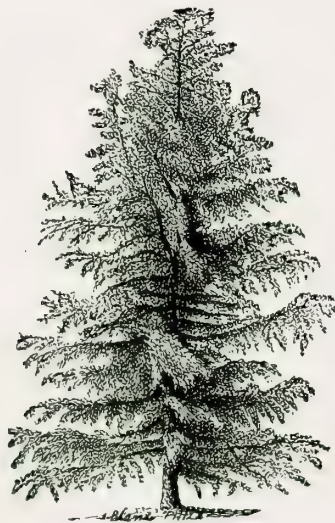
Canadensis (Kentucky Coffee Tree)—A picturesquely irregular tree, 30 to 60 feet high, with peculiar rough-barked, twigless branches and broad fronds of twice-pinnate foliage of a peculiar bluish green. Bears long racemes of white flowers in early summer. The familiar name is from the seeds in its broad beans, which were once used for coffee in the southern mountains. Yellow in fall.

HALESIA**(Snowdrop, or Silver Bell Tree)**

Tetraptera—A neat and pretty little tree, rarely over 12 ft. high, with large, dark green leaves. May be grown as a shrub. In May while the leaves are yet small, its branches are hung thickly with small white or pinkish drooping bells about one inch long. These are followed by large and curious winged seeds which impart to it a peculiar ornamental effect.

KOELREUTERIA

Paniculata (Varnish Tree)—A rare tree, 25 to 30 feet high, from North China, very showy in July, when spangled with foot-long clusters of golden yellow flowers, and in autumn when its foliage colors to crimson and gold. It is perfectly hardy, and its neat, trim shape, coupled with its light, airy leaves, makes a very desirable tree for the lawn.

**LARIX (Larch)****LARIX (Larch)**

Europæa (European Larch)—A tall and handsome deciduous conifer, which grows to 100 feet in height, with tapering trunk and pyramidal head. Particularly beautiful in early spring when covered with soft and feathery foliage of a delicate green. Its plummy foliage and drooping twigs give it a very graceful effect, while its trim, straight figure is most imposing and majestic and becomes the feature of any landscape.

LIQUIDAMBAR

Styraciflua (Sweet Gum)—A tree that is beautiful at all stages, and useful in all sorts of planting.

Varying from 60 to 80 feet in height, it has a narrow, ovate head, formed of short corky-winged branches and masses of star-shaped lustrous leaves that color to intense crimson scarlet in fall. Even in winter its odd, swinging sea balls and corked winged branches make it picturesque and interesting. The name is from its fragrant sap and leaves. We have no finer tree for street and park planting or for specimens.

LIRIODENDRON

Tulipifera (Tulip Tree)—A tall, magnificent native of rapid, pyramidal growth, to 100 feet. Its smooth erect gray trunk rises to a great height and is clothed with a splendid vesture of large glossy leaves, spangled in spring with large tulip-shaped flowers of greenish yellow and orange. One of our most distinguished tall trees, for broad avenues, parks and lawns.

MAGNOLIA

The spring inflorescence of the Magnolias is grand beyond description. Their great white, pink and purple cups open in rich profusion before the leaves of other trees appear. The fruits which follow them are large, bright-colored and showy; the leaves are tropical in size and appearance; the trees are naturally of fine habit and bloom when quite small. They should be transplanted only in spring.

Soulangeana (Soulange's Magnolia)—One of the hardiest and finest of foreign Magnolias, resembling *Conspicua* in flower and habit. In growth it is more like a large shrub, 20 to 30 feet high. Its blossoms are from 3 to 5 inches across, cup-shaped, white and rosy violet, opening a little later than *Conspicua*, yet before its leaves, which are massive and glossy.

Speciosa (Showy-Flowered Magnolia)—The flowers of this species are a trifle smaller and lighter-colored than those of *Soulangeana*, but the tree is of the same habit, 20 to 30 feet high; the flowers open about a week later and remain perfect on the tree longer than those of any other Chinese Magnolia. Very hardy.

HARDY AMERICAN MAGNOLIAS

Acuminata (Cucumber Magnolia)—The tallest of all the species, growing rapidly into a fine pyramidal tree, 60 to 90 feet high. In midsummer large creamy white blossoms appear among its deep green leaves, and large, cucumber-shaped fruits that turn bright crimson succeed them. A grand avenue tree. Yellow in fall.

**MAGNOLIA SOULANGEANA**

Tripetala (Umbrella Tree)—Named from the whorled arrangement of its great glossy leaves. The white flowers, also of great size, open in June and are followed by rose-colored fruit cones. Tree grows to 40 feet.

PLATANUS (Plane Tree, Sycamore)

Orientalis (Oriental Plane)—One of the oldest cultivated trees, and among the best for street and avenue planting. It grows rapidly to grand size, is bold, picturesque, hardy, healthy, free from insects, vigorous in all soils, especially along the water's edge. A lofty, wide-spreading tree, growing 60 to 80 feet tall, with large, leathery, clear-cut leaves that turn yellow in fall.

Occidentalis (American Plane; Buttonwood)—Broad-spreading; round-topped, massive and picturesque, often 100 to 120 feet high. Very effective in winter when its branches show almost as white as a birch's, and its mottled trunk of gray, green and brown is revealed.

POPULUS (Poplar)

Alba Bolleana—Similar to the well-known Lombardy Poplar in habit, but broader, and like it, useful in breaking the monotony of lower round-topped trees. Will grow to a tall spire, 80 feet high. Its leaves are glossy green above, silvery underneath. A favorite with landscape gardeners.

Monilifera (Carolina Poplar)—Unexcelled for quick growth and effect, its rapid growth giving an air of luxuriance to places where other trees appear starved. Showy and cheery from the constant movement of its glossy, silver-lined leaves, yet always casting a dense, cool shade. If well pruned back during the first few seasons it makes a strong, durable tree, 60 to 80 feet high.

Var. aurea Van Geertii (Golden Poplar)—One of the finest golden-leaved trees for contrast.

Pyramidalis (Lombardy Poplar)—A fast, erect grower of spire-like habit, much used in formal planting. The pointed top gives variety to the sky line.

PRUNUS (Plum)

Padus (European Bird Cherry)—A pretty medium-sized tree, 30 feet high, with glossy leaves and long clusters of small fragrant white flow-

ers in May. This is followed by black fruits, loved by all the birds. One of the earliest trees to leaf out in the spring.

Pissardi (Purple-leaved Plum)—A distinct and handsome little tree, rarely over 20 feet high, covered with a mass of small white, single flowers in spring, later with showy pinkish purple leaves that deepen in color to the end of the season. Valuable for ornamental hedges or planting in quantity for contrast. It is perfectly hardy wherever the common plum will stand, and is a unique and beautiful ornament to the lawn at all times of the year.



PYRUS, BECHTELI (Flowering Crab)

PYRUS (Crab)

Angustifolia, Bechteli (Bechtel's Flowering Crab)—A low, bushy tree, rarely over 20 feet in height. It is the most beautiful of all the fine varieties of Flowering Crabs. At a distance the tree seems to be covered with dainty little roses of a delicate pink color. Blooms when quite young. Is very fragrant.

QUERCUS (Oak)

Although their growth at first is slow, if planted in good soil the oaks will outgrow many other trees. For wide lawns, parks, and public grounds, avenues, etc., where they have room to

develop, few trees are so majestic and imposing, so enduring, so varied in expression. Their great vigor and hardihood enable them to withstand many untoward conditions.

Alba (White Oak)—Grandest of its genus and our American trees. A spreading, towering species, growing 100 feet high when fully developed, with rugged, massive trunk and branches. The deeply lobed leaves change to dark crimson in fall.

Coccinea (Scarlet Oak)—A grand, round-topped tree 60 to 80 feet high, with bright green deeply cut leaves that color to sparkling red in fall.

Palustris (Pin Oak)—Almost pyramidal in habit and sometimes described as half weeping when old, because its lower branches touch the ground. It grows and develops the family characteristics faster than most oaks, as may be seen from some fine avenues planted within the last score of years. It grows 60 to 80 feet, sometimes taller. The leaves are deep green, glossy and finely divided. Orange scarlet in fall.

Rubra (Red Oak)—A large tree 80 to 100 feet, unusually large in leaf and quick in growth. The young shoots and leaf stems are red, the foliage purplish, crimson in autumn. A most beautiful object in the lawn.

SORBUS (Mountain Ash)

Medium-sized trees with handsome, pinnate leaves, neat habit and showy crops of bright red berries, persistent until late in winter, giving a brilliant note to the autumn landscape.

Sorbus (Pyrus) Aucuparia (European Mountain Ash)—Hardy, erect, 20 to 30 feet high, with smooth bark and dense, regular head; berry clusters large and bright.

Quercifolia (Oak-leaved Mountain Ash)—Of the same fine habit, but with dark, lobed leaves, downy underneath.

SALISBURIA (Ginkgo)

Adiantifolia (Maidenhair Fern Tree)—A distinguished Japanese tree, 40 to 60 feet high, of columnar growth when young, spreading with age into an odd, sketchy outline. Its thick, leathery leaves are clear-cut and shaped like the leaves of the Maidenhair Fern. A rare and elegant tree that is yet robust enough to endure general city planting. Its unique appearance and habit of growth make it a valuable acquisition. Grows fast; has no insect or fungus enemies.



POPULUS MONILIFERA (Carolina Poplar)

SASSAFRAS

Officinale—A really handsome medium-sized tree, 30 to 50 feet high, with fragrant, light green foliage and bark. Its small yellow flowers are attractive in early spring, and followed later by dark blue fruits. Grows well even on thin soils

SALIX (Willow)

Besides the beauty of their airy summer foliage, the Willows have a distinct value in the brightness of their bark when leaves have fallen. There are few trees that can be used to such advantage for cheery winter effects. They grow fast and are adapted to a variety of soils and uses. Frequent cutting back gives a thicker growth of bright young twigs.

Laurifolia (Laurel-leaved Willow)—A beautiful, distinct, medium-sized tree, 8 to 20 feet high, with shining, laurel-like leaves that make it very conspicuous in sunshine. Can be clipped into form like a bay tree; has bright green bark; is beautiful the year round.

Rosmarinifolia (Rosemary-leaved Willow)—A pretty dwarf, not over 8 feet high, very airy in effect, because of its feathery branches and small silvery leaves. Grafted on tall stems, it forms a neat round head of feathery silver-gray.

Vitellina Aurea—A fine tree at all seasons, but very showy in the winter months for its bright yellow bark, making it a conspicuous feature in the landscape. Grows to be a very large tree, 80 to 100 feet high, with a venerable appearance

We can also supply in quantity other bright-barked Willows for grouping, among them **Cardinalis** and its variety, **Wentworth** (bright and deep red), **Canescens**, **Scarlet** and **Japan Golden**.

SOPHORA (Pagoda Tree)

Japonica (Japan Pagoda Tree)—An odd and unique specimen tree, 40 to 60 ft. high, so different from other trees in style of growth that it always attracts attention. Its short branches form a dense, round head. In August its shining green leaves are decked with clusters of white blossoms.

TILIA (Linden, Basswood)

The Lindens grow fast, forming noble trees of rounded outline, and casting a dense, cool shade. The leaves are large and cordate, the flowers light yellow, exhaling a delightful citron odor. All are among our best large-growing street and avenue trees, fine also for specimens and grouping.

Americana (American Linden)—A stately tree, growing 60 to 80 feet tall, with large, shining cordate leaves. Particularly valuable for its beautiful white wood. Its flowers appear in July.

Platyphyllos (Large-leaved European Linden)—An exceedingly broad-leaved variety growing into a noble tree 60 to 80 feet high. It flowers in June, the earliest of the Lindens.

Argentea (Silver-leaved Linden)—Conspicuous among other trees because of its silver-lined leaves. These give it great brilliancy when ruffled by the wind. Handsome, vigorous, pyramidal in shape. 60 to 80 feet high.

ULMUS (Elm)

Americana (American Elm)—Easily distinguished by its wide arching top, vase-like form and pendulous branchlets. Next to the Oak this is the grandest and most picturesque of American trees. Attains 80 to 100 ft. Dull yellow or brown in fall.

Scabra (Montana) Scotch or Wych Elm—A grand spreading tree of rapid growth and variable habit. Attains a height of 100 feet and forms a broad, round-topped head.



PENDULA LACINIATA
(Cut-Leaved Weeping Birch)

Weeping Deciduous Trees

CERASUS

Japonica, rosea pendula (Japan Weeping Rose-flowered Cherry)—An exquisite little tree, 8 or 10 feet high, draped in rosy masses of bloom in early spring before its leaves appear. Even when grafted on tall stems its slender branches sometimes sweep the grass in graceful garlands. Well adapted to small lawns.

FAGUS (Beech)

Sylvatica, pendula (Weeping Beech)—A large, luxuriant tree, of curious, irregular growth, to 60 or 80 feet. Its sparkling masses of foliage are swept by tortuous branches into fountain-like masses of green, wonderfully rich and graceful in effect.



MORUS, PENDULA (Weeping Mulberry)

MORUS (Mulberry)

Alba, Tatarica pendula (Teas' Weeping Mulberry)—We cordially recommend this as one of the thriftiest, hardiest and most beautiful of weeping trees. Grafted on a straight stem, 6 to 8 ft. high, its branches sweep the ground, forming a beautiful tent of green. It transplants easily and is appropriate for both large and small places. The leaves are lustrous and distinctly lobed.

BETULA (Birch)**Pendula Laciniata** (Cut-leaved Weeping Birch)—

Many attractive characteristics combine to make this a tree of wonderful grace and beauty. Tall and slender, growing to 60 feet; vigorous, with slender branches in drooping festoons of delicately cut leaves. It colors brilliantly in fall and its white trunk and branches make it a beautiful winter picture.

Pendula Youngi (Young's Weeping Birch)—Of naturally trailing growth, with long, slender shoots of picturesquely irregular form.

PYRUS

(*Sorbus*) **Aucuparia, pendula** (The Weeping Mountain Ash)—Is a picturesque little tree 10 to 15 feet high; excellent for lawn specimens or for covering arbors. It has beautiful pinnate foliage and bears white flowers in broad corymbs in May and June, followed by clusters of bright red cherry-like fruits.

**SALIX PENDULA (Kilmarnock Willow)****SALIX (Willow)**

Babylonica (Our familiar Weeping Willow)—A fine drooping tree 30 to 40 feet high, with slender branchlets. This tree is sometimes called the Napoleon Willow from the fact that it was planted at his grave at St. Helena.

Dolorosa (Wisconsin Weeping Willow)—Of similar fine habit, but hardy for the North.

Annularis (Ring Willow)—An odd tree with the leaves twisting so as to form rings along the drooping branchlets.

Caprea, Pendula (Kilmarnock Weeping Willow)—

Unique in form and vigorous in all soils. This variety has been widely planted. It is usually grafted 5 to 7 feet high on stout stems, and then forms a cone of glossy foliage.

ULMUS (Elm)**Scabra, pendula** (Camperdown Weeping Elm)—

One of the most distinct and picturesque of all our weeping trees. Grows well in most any climate; is of fine and notable habit, the strong branches often sweeping out horizontally several feet before they curve downward, making a broad, handsome head.

**ULMUS PENDULA (Camperdown Elm)**

Evergreens

The landscape gardener is no longer content to use evergreens in quantity merely for specimen trees, shelter-belts, screens, hedges, etc. As new beauties are being continually discovered in them, new uses develop also. They form perfect backgrounds for the flowering shrubs of early spring, the berries of autumn, and winter's tracery of bright bark and twigs. Beautiful beds of permanent color are formed by grouping together sorts of moderate growth, with contrasting foliage—golden, golden green, silver-blue, rich, dark and delicate green, with bright-berried sorts interspersed. Other new uses are for filling window-boxes, and growing evergreens in tubs for hall and porch plants.

Our evergreens are all carefully grown, at good distances for symmetrical development, are root- and top-pruned into handsome, shapely specimens that will transplant successfully to new homes

with ordinary care. We pack them so that the root-fibers are well protected and will reach their destination in good growing condition. If planters will continue this care to keep the fibers from drying out by exposure to air and sun until the stock is planted, its success is reasonably sure. Prune evergreens before their spring growth starts, and only when necessary to thicken their growth or preserve their shape.

ABIES (Fir)

Balsamea (American Silver Fir)—A regular, symmetrical tree, assuming the cone shape when quite young, reaching 50 to 80 feet in old age. Leaves dark, lustrous green, lighter beneath.

Concolor (The White Fir) of the Rocky Mountains is one of the most beautiful species in cultivation, growing 80 to 100 feet in height. It withstands heat and drought better than any other Fir, is very hardy and grows rapidly. Its graceful habit, and broad, handsome foliage, glinting with blue on the upper surface, silvery beneath, make it a rival for the elegant Colorado Blue Spruce. Especially bright when young.

Violacea—Like the above, with foliage of a deeper blue.

Douglasi (Douglas' Spruce)—A Colorado species. Forms a large, spreading pyramid of light green foliage, 80 to 100 feet in height.

Nordmanniana (Nordmann's Silver Fir)—One of the richest evergreens, forming a dense, dark specimen tree of beautiful proportions, that may be finely contrasted with lighter-foliaged sorts. The foliage is wide, dark and lustrous, with a silvery, sparkling under-surface.

Excelsa Remonti (Dwarf Pyramidal Norway Spruce)—A very fine evergreen for individual planting. It is of decidedly dwarf nature and pyramidal. Grows very compact and not over four feet in height.

CEDRUS

Atlantica Glauca (Mt. Atlas Cedar)—A very fine specimen of the Cedar family. Can be planted in groups with excellent effect. Foliage decidedly light blue, resembling the Kosteriana Blue Spruce in color.

CUPRESSUS (Cypress)

Lawsoniana (Lawson's Cypress)—A rare handsome conifer, the branches of which droop gracefully at the tips. Their rich, deep green color is retained all winter. Tender in the North.

JUNIPERUS (Juniper, Red Cedar)

Hibernica (Irish Juniper)—An erect dense column of dark green, found quite effective in general landscape and formal planting.

Suecica (Swedish Juniper)—Of narrow columnar forms, with lighter, more bluish foliage than the Irish Juniper. Branchlets droop at the tips.

Aurea (Golden Japan Juniper)—Of moderate growth and spreading habit. The attractive golden-hued foliage is constant throughout summer.

Virginiana (Red Cedar)—Is always popular and thrives well in soils or situations where other trees will not grow.

Glaucia (Blue Virginia Cedar)—Throughout the year the leaves are a rich silvery blue. Very handsome and effective.

PICEA (Spruce)

Alba (White Spruce)—One of the very best conifers, especially for cold climates. Compact, upright, growing 60 to 70 feet in height, long-lived, retaining its branches to the ground, aromatic, drought-resisting; varies in color from light green to glaucous blue. A good species for growing in tubs.

Excelsa (The Norway Spruce)—Its many uses are well known. It is planted for hedges, shelter-belts, screens, background, etc., in large quantities every year. It has a naturally fine gothic form, grows fast, reaching 80 to 100 feet, and seems to suit all soils.

Excelsa Nana Compacta (Dwarf Compact Norway Spruce)—This is also a fine variety for planting singly. Partakes very much of the nature of the Remonti in all except that it is flat at the top and not pyramidal. Grows very compact.

Aurea (Golden Norway Spruce)—Not so high as Excelsa, but is desirable on account of its yellow foliage, making a lively contrast to the darker sorts.

Inverta (Weeping Norway Spruce)—Grotesquely pendulous; attractive from its novelty and unique habit. Grows 40 to 60 feet high and has larger and lighter green foliage than its parent.

Nigra (Black Spruce)—A handsome small tree, rarely over 25 feet high, with slender pendulous branches. Valuable for cold climates and light, dry soils.

Pungens (Colorado Blue Spruce)—A magnificent tree, 80 to 100 feet high, with a silvery blue sheen that makes it a striking object in any

landscape. Hardy in any exposure, of vigorous growth and elegant habit, with broad, plummy branches, often as regularly set in whorls as those of an Araucaria.



PICEA KOSTERIANA (Koster's Blue Spruce)

Kosteriana (Koster's Blue Spruce)—The very best of the Blue Spruces. Foliage is silvery blue, densely crowded on the many branches. We have paid particular attention to getting the absolutely true stock of this famous tree and can guarantee its true blue color and character. In height it is the same as the former variety.

PINUS (Pine)

Laricio, Austriaca (The Austrian Pine)—Is one of the best foreign species for this country.

Strobus (White Pine)—Tall, stately, and most beautiful of all our native pines. It is also among the quickest-growing, longest-lived, and most generally useful. The needles are long, silvery blue, and plummy in effect; the tree grows naturally into symmetrical specimens and makes a most imposing appearance on the lawn when grown singly. A valuable timber tree for even the poorest soils.

Sylvestris (Scotch Pine)—Dense, broadly pyramidal, luxuriant in growth, with strong, erect shoots and silvery needles.

RETINOSPORA (Japan Cypress)

As miniature trees, these handsome, neat-growing evergreens are unequaled. The group includes species very different in habit. They give exceedingly pretty effects in outdoor grouping, and, grown in tubs or window-boxes, are valuable for house decoration in the winter. Outdoor groups or specimens need some protection in the winter.

Obtusa, gracilis aurea—A neat and graceful bush of fern-like shoots of a fine golden hue.

Plumosa Aurea (Golden Japan Cypress)—One of the few really golden evergreens. The color of the young growth contrasts strongly with the darker shade of the older foliage. Striking and useful in many ways.

THUYA (Arborvitæ)

The Arborvitæ vary greatly in habit and color. They bear transplanting and pruning well and have many uses, especially in formal gardens. They are also well suited for bedding with other evergreens, for hedges, screens, shelter-belts and house decoration. All are neat and symmetrical in habit, dense, bushy, with flattened, frond-like leaves.

Occidentalis (American Arborvitæ)—The well-known screen and hedge plant. Can be sheared to any desired size and shape. Will grow even in wet soil.



PINUS STROBUS (White Pine)

Aurea Douglassi (Douglas' Golden Arborvitæ)—Hardest of its color. Of broader and more bushy growth, with long, slender branchlets and yellow foliage.

Aurea Hoveyi (Hovey's Golden Arborvitæ)—Is a distinct, compact, hardy American seedling; dense and conical, with light, golden green foliage.

Compacta—Dense growing, globular, with leaves of light grayish green.

Ericoides—Dwarf and pyramidal, with heathlike leaves of grayish green, turning to brown in winter.

Globosa (Globe Arborvitæ)—A dense, light green evergreen of dwarf habit, grows naturally round like a ball. One of the best of the dwarf.

Lutea (George Peabody)—Of dwarf pyramidal habit, a decided golden color, which is retained throughout the entire year. The finest of the golden varieties.

Pyramidalis (Pyramidal Arborvitæ)—A tall, slender column of dark green resembling Irish Juniper in growth, retains its color in the winter. Very hardy, will stand severe shearing.



THUYA (Tom Thumb)

Tom Thumb—Similar to Globosa, but taller in growth and more bushy in foliage.

Wareana (Siberian Arborvitæ)—Pyramidal in shape. Very hardy. Dark green foliage.

TSUGA (Hemlock Spruce)

Canadensis (Hemlock Spruce)—Are beautiful native, naturally open, free and drooping in growth, but very dense when pruned, forming good specimen trees and hedges. Its dark, pure green color is retained all winter. A most graceful evergreen.

Evergreen Shrubs

BUXUS (Box)

Sempervirens (Tree Box)—A beautiful evergreen shrub of rather slow growth, with small, shining foliage. Familiar in old-fashioned gardens, indispensable in formal ones. It grows well in many soils and endures much pruning. Quite popular as a tub plant, for house and terrace decoration.

Suffruticosa nana—The pretty Dwarf Box so much used for edging. Slow-growing, neat, dense; the best plant in cultivation for the purpose.

Variegata—A beautiful small bush, having shining leaves oddly marked with white.

DAPHNE

Cneorum (Garland Flower)—A charming dwarf shrub with fine foliage and dainty clusters of pink, perfumed flowers in May. Blooms at intervals until September. Excellent for growing in front of shrubbery.

EUONYMUS

Radicans Variegata—A charming shrub of dwarf and trailing habit; it is perfectly hardy and has foliage beautifully variegated with silvery white, tinted with red in the winter. Unsurpassed for borders.

MAHONIA

Aquifolia (Holly-leaved Mahonia)—Sometimes included under Berberis. Handsome native evergreen of medium size, with shining, prickly leaves and showy, bright yellow flowers in May, followed by bluish berries. Quite useful in decorative planting for its neat habit and fine bronze-green leaves.

RHODODENDRON

In Variety—These are the most magnificent of the evergreen shrubs, with rich, green foliage and superb clusters of showy flowers. They require a peaty soil, free from lime, and a somewhat shaded situation; they do best near the seashore, and will repay all the care that may be bestowed in preparing a bed suited to their wants. Protect in winter by driving stakes and filling in with leaves to cover plant. Can furnish in colors of red, pink, white, lavender and blue.

Deciduous Shrubs

Flowering shrubs and plants, and those with brilliantly colored foliage, are to ornamental gardening what the finishing touches are to the picture or the decorations to a room. They help to fill out the well-rounded forms of groups of trees and, possessing more variety of colors and foliage than the trees, they add beautiful bits of color and pleasing contrasts. Being small in size, they are especially useful for small gardens and borders, for ornamenting the foregrounds of groups of trees and evergreens, and in particular they serve the purpose of a setting or ornamentation close to the dwelling.

Shrubs vary in size of growth from dwarf to tall, and there are scarcely two varieties which produce the same effect. They also vary greatly in point of hardiness for the colder climates, and it would be difficult, indeed, for anyone not familiar to give general advice on the best varieties to plant.

Shrubs must suit the object for which they are to be grown. Often a fine lawn is spoiled by having thrust in here and there shrubs and trees without relation to method, purpose or design. Shrubs are best planted in groups with due consideration to size and character. They afford excellent screens for undesirable objects, such as chicken yards, old buildings and fences, and the effect of a shrub border for a front or back lawn, produced by a careful setting, is always a pleasing one. Beautiful color effects are obtained by selecting shrubs with foliage of contrasting color. The silver, golden, purple and many shades of green, if carefully arranged in accordance with our new method, never fail to catch the eye. With the exception of a little pruning and an occasional stirring of the soil, shrubbery practically takes care of itself and requires but little care. The value in shrubbery lies less in the bloom than in the foliage and the general character as to form and habit. Roses are rarely good for shrubbery effect, the Rosa Rugosa, the Baby Rambler and the wild natives being the only ones suitable for the shrubbery border.

This issue of our catalogue gives correct descriptions and the assortment we offer comprises all of the desirable species and varieties to be recommended for this country. However, it would be almost impossible for us to designate all the different climates we have in this great country of ours, as adapted to each variety we grow.

WE OFFER OUR ADVICE FREE

As a rule, the ordinary planter is all at sea as to what to order or what to do after planting. Without some knowledge or proper advice as to what to plant, mistakes are bound to follow. If you know what you want as to effects, but are unacquainted with the kinds of shrubs and plants to produce these effects, **get our advice**—or that of someone who knows how to advise you on the kinds which will thrive best in your climate.

HOW TO GROUP SHRUBBERY

For large groups and heavy screens, select fast-growing shrubs for the background, using medium and dwarf-growing varieties and perennials for the border. For banking against porches and dwellings, select dwarf and medium-growing varieties, and, if on a small property, prune in hedge form. Fast-growing varieties of shrubs should be planted about three feet, while slow-growing should be set two to two and one-half feet apart.

CARE OF TREES AND SHRUBS BEFORE PLANTING

On arrival of the trees and shrubs they should be unboxed, or unbaled, in the shade if possible, and trenched-in. By trenching is meant putting the bundles in the ground in trenches, which are then refilled to protect the roots. The idea is to keep them cool and moist, and plenty of water should be used.

HOW TO PLANT SHRUBS

The ground should be thoroughly prepared by deep spading and, if poor, it should be enriched. When planted in beds and the ground is all loose, the size of the hole does not make any difference—just so the roots seat naturally. When planted separately in the sod the size of the hole should be much larger and deeper than the roots, so they will have plenty of mellow soil to grow in. The harder the ground the larger and deeper the hole must be. Loose soil should be put in among the roots and packed very firmly until near the surface, which should be left loose. Plant a little deeper than they stood in the nursery, and after planting cut back to about one-half their height. If the ground is dry, water thoroughly.

PRUNING SHRUBS

After transplanting, always aim to prune back all the wood to 10 or 12 inches from the ground. This method of pruning has a tendency to make them bush out close to the ground, thus prevent-

ing the open and straggly effect often seen. **Where immediate effect is desired** regardless of future beauty, little or no pruning may answer the purpose. Shrubs should be pruned to regulate their growth and make them graceful, always trying to keep the branches well down to the ground. Thin out all old and gnarly stems, and endeavor to preserve a fair fullness of healthy shoots with plenty of well-ripened twigs for flowers. **For compact formal effects**, as for group bankings, for porches and dwellings, pruning back the top to confine the growth is absolutely necessary. To obtain a compact, bushy form, it is necessary to prune in the early spring and also several times during the growing season. This method of pruning is recommended only where a short or heavy bushy form is desired.

vice is given on renovating and improving old gardens, also on pruning of trees and plants, on soil treatment, on combating the ravages of destructive insects, and on all matters pertaining to horticulture.

ALTHAEA. See Hibiscus

AMORPHA

Fruticosa (False Indigo)—Grows 6 to 10 feet high, and forms a large, spreading bush, with compound leaves, containing 10 to 20 bright green leaflets, and slender spikes of deep violet-blue flowers in June, after the flowers of most shrubs have faded.

AMYGDALUS (Flowering Almond)

See Prunus



THE GREENING METHOD OF HARDY SHRUB BORDER PLANTING

OUR LANDSCAPE DEPARTMENT

This department has assumed enormous proportions and its operations reach to all parts of this country. We prepare artistic plans and comprehensive specifications from rough pencil sketches mailed to us and furnish complete detailed instructions, so explicit as to enable anyone of ordinary intelligence to lay out and plant a garden or park with success. Our charges for this work will be found very reasonable.

EXPERT CONSULTATION

We solicit expert consultation on all kinds of municipal, park and cemetery work. Expert ad-

BERBERIS (Barberry)

There is a charm about the Barberries hard to describe, and no more practical and beautiful shrub can be grown. Their masses of white, yellow or orange flowers are showy in spring, their leaves color brightly in fall, their scarlet, blue or black berries are persistent through most of the winter. They make a dense, low hedge, will stand any amount of shearing, are perfectly hardy and will grow in any sunny, well-drained position.

Canadensis (Canadian Barberry)—Seldom grows over three feet high, with bright green foliage, which turns to beautiful shades of orange, red and bronze in the fall.

Thunbergii (Thunberg's Barberry)—Inimitably neat and dense in growth, barely three feet high under the best conditions, yet quite graceful because of its drooping branches. The yellow flowers are followed by scarlet fruits borne in dense profusion on the long stems and clinging through most of the winter; the leaves color to scarlet and gold in autumn.

Vulgaris (European Barberry)—Flowers yellow; berries dark red. Grows upright, with light green foliage.

Purpurea (Purple Barberry)—A showy and effective shrub with fine purple leaves that contrast beautifully with its flowers and with other shrubs.

CALYCANTHUS (Carolina Allspice)

Floridus—The wood is fragrant, foliage rich; flowers of rare chocolate color, having a peculiarly agreeable odor. Flowers in June and at intervals afterwards.

CARAGANA (Pea Shrub)

Arborescens—Makes a very handsome show in the late spring with its compound, bright green foliage and numerous small clusters of bright yellow flowers. Perfectly hardy and valuable for either group or individual planting.

CHIONANTHUS (Fringe Tree)

Virginica (White Fringe Tree)—A small treelike shrub, much admired for its curious fringe or hairlike flowers that cover the whole surface in midsummer.

CLETHRA

Alnifolia (Sweet Pepper Bush)—A native shrub of low and dense growth; leaves abundant and light green; has numerous spikes of small white fragrant flowers. Blooms abundantly in July.

COLUTEA

Arborescens (Bladder Senna)—Of quick growth in any dry, sunny situation, forming graceful clumps of delicate foliage. Its long racemes of yellow and cinnabar-red pea-shaped flowers appear in summer, and are followed by large showy red seed-pods.

KERRIA (Corchorus)

Japonica—A slender, green-branched, dwarf-growing shrub with small light green leaves and small globular yellow flowers. Very fine for hedges.

Argentea variegata (Silver variegated-leaved Corchorus)—A dwarf variety from Japan, with

small green foliage edged with silvery white; slender in growth, small yellow flowers, one of the finest of dwarf-growing shrubs. Especially adapted for porch bankings or in groups where a showy dwarf shrub is desired.

CORNUS (Dogwood)

Alba Siberica (Siberian Dogwood)—Free growing and very hardy, flowers white and clustered. Bark very showy dark red.

Spaethi Aurea—Fast growing, with bright red bark, leaves broad, edged with creamy yellow. White flowers in June.

Siberica Variegata—A large, spreading shrub with clusters of white flowers in June, variegated foliage and coral-red bark.

Alternifolia—Of distinct growth with branches arranged in irregular form, forming flat horizontal tiers of large leaves. The flowers fragrant in large clusters in May and June, followed by dark blue fruits.

Candidissima (Panicked Dogwood)—A handsome shrub with gray branches, bearing immense panicles of white flowers in May and June, followed by white fruit borne on bright red stems.

Sanguinea—Has purplish red branches and leaves handsomely marked with white. Flowers greenish white in May and June in flat-topped clusters, followed by bunches of black berries.

CORYLUS (Filbert, Hazel)

Avellana, atropurpurea (Purple-leaved Filbert)—The Hazels are sometimes used as hedges and are valuable for this purpose. In early spring, the long, drooping catkins are very beautiful, and in fall the shrubs bear large quantities of delicious nuts. This variety is particularly valuable for group effects, the large, purple leaves holding their color well. It grows to a height of 10 to 12 feet.

CYDONIA (Pyrus Japonica)

Japonica (Japan Quince)—Very early in spring this fine old shrub is completely covered with dazzling scarlet flowers. The leaves are deep green and glossy, the growth tall, bushy, twiggy, with stout branches armed with fierce thorns. The quince-shaped fruits are quite fragrant. It makes a beautiful flowering and defensive hedge; grows naturally 3 to 6 feet high, but bears any amount of shearing.

DESMODIUM

The Desmodium, or, as it is called by some authorities, Lespedeza, is mostly listed as a peren-

nial, as it dies down in winter, but is perfectly hardy. It is valuable for planting in front of shrubbery and its long, drooping racemes of purplish rose flowers are distinctly ornamental.

Penduliflorum (Lespedeza Sieboldi)—The clustering stems grow only 2 to 4 feet long, and droop with their weight of flowers in early autumn. Leaves are rich green, elliptic in shape and grow in threes.



TREE HYDRANGEA

DEUTZIA

No other shrub in the whole list will yield better returns for a minimum of care than the Deutzias. They vary greatly in height and habit but all have dainty bell- or tassel-shaped flowers borne thickly in wreaths along their branches in June. The taller sorts are useful for specimens, groups, and the background of shrubberies; the dwarfier for borders or for planting near the house or in front of the piazza.

Crenata—The beautiful white, single-flowered species, growing 6 to 8 feet tall, and a mass of bloom in early June.

Fl. pl.—A double form of the type. Handsome and effective. The white flowers are delicately flushed with pink.

Candidissima—The pure white double flowers in erect panicles 2 to 4 inches long, are so perfect in shape that they are frequently used as cut-flowers. The bush is neat and shapely, growing 6 to 8 feet high, and is a handsome addition to any planting.

Pride of Rochester—A showy, early, and large-flowering sort that blooms in May before the others. Grows 6 to 8 feet tall. The white flowers are large and double.

Watereri—A superb sort, with large flowers borne in long, loose racemes. They are a pretty pink color and open out quite flat. The shrub is extra-vigorous and hardy, growing to 8 feet under proper conditions.

Discolor grandiflora—A beautiful variety from China, with large leaves, dark green above, lighter beneath. The white flowers are borne in loose corymbs in June, and have spreading petals. Plants grow to 7 feet in height.

Gracilis (Slender-branched Deutzia)—A neat, dense little bush, rarely over 2 feet high, that blooms in May, wreathing its drooping branches with pure white flowers. Equally valuable for shrubberies and forcing.

Lemoinei—Rarely growing over 3 feet high, with spreading branches, it has bright green leaves 2 to 3 inches long and white flowers grown in large clusters in early summer.

DIERVILLA (Weigelia)

Florida, amabilis—Very free blooming and hardy, of good habit and rapid growth. Large deep rose-colored flowers.

Florida Candida—Very best of all white flowering Weigelia. Continues to bloom throughout the entire summer.

Rosea—Same as Candida in habit except that it has pink flowers. The most popular variety in cultivation.

Rosea Nana Variegata—Of neat dwarf habit, with pink flowers and leaves broadly margined with creamy white.

Eva Rathke—New, bright crimson flower, blooms all summer, medium growth, hardy. The most valuable and attractive bloomer of this class.

ELAEAGNUS (Oleaster)

Angustifolia (Russian Olive)—A very hardy and handsome species of tree-like form. The leaves are particularly handsome, willow-like and of a rich, silvery white. Flowers are small golden yellow and very fragrant. Blooms in June.

Longipes (Silver Thorn)—Showy shrub of strong bushy growth. Its fragrant creamy white blossoms open in April or May.

EUONYMUS (Strawberry Tree)

Europaeus (European Spindle Tree)—A large tree-like shrub. Flowers abundantly in spring with bright yellow flowers in nodding clusters, followed by pink fruits enclosed in orange arils. Very hardy, one of the most beautiful of shrubs.

Radicans—A beautiful Japanese variety, grown mostly as a vine. When grown as a shrub it trails along the ground and roots, forming a dense growth. When trained as a vine, it climbs to 20 feet, with small, greenish-white flowers appearing in June and July. Fruits are pink, the cells separating and exposing the scarlet arils which cover the seeds.

EXOCHORDA (Pearl Bush).

Grandiflora—One of the finest shrubs of its season, but difficult to propagate and always scarce. Its long, loose sprays of large, pure white flowers open in May, in such profusion as to give the shrub a very rich effect. In the bud form they look like pearls strung on slender threads. The bush grows 8 to 10 feet high, and is one of the most distinctively ornamental shrubs in cultivation.

FORSYTHIA (Golden Bell)

These splendid old shrubs, growing 8 to 10 feet tall in good soil, light up the garden with glinting masses of yellow, very early in spring, before the leaves appear and usually blooming with the crocuses, which are frequently planted in front of and beneath them. All are of strong growth, entirely hardy, with curving branches that sometimes root at their tips; stems and leaves retain their color until late fall.

Intermedia—One of the most floriferous, with slender, arching branches, and dark green, lustrous leaves. It blooms so early that it is frequently covered with its bright golden flowers while the ground is covered with snow, and is one of the very first promises of the bright and beautiful spring days to follow.

Suspensa—Long, curving branches, used for covering arches and trellises.

Fortunei—The handsome, more erect form generally known.

Viridissima—The flowers of this variety are a little deeper yellow than in other sorts, and are sometimes twisted. The bush is not quite so hardy as the others of the species, and it is best to give it some slight protection in winter in northern latitudes.

HAMAMELIS (Witch Hazel)

Virginiana—Valuable because its fringe-like yellow flowers open so late in fall—often in November—when there are few other blossoms outdoors anywhere. Grows 10 to 15 feet tall, with fine leaves that color to yellow, orange or purple in fall and drop before the bright yellow flowers with narrow, twisted petals appear, making them quite conspicuous among bare branches. Likes a moist, sandy, or peaty soil and partial shade.

HIBISCUS SYRIACUS (Althea)

(Rose of Sharon)

The Altheas are fine free-growing flowering shrubs, of very easy cultivation, desirable on account of flowering in August and September when nearly all other trees and shrubs are out of bloom. Tender in some localities.

Rubra flore pleno—Double red Althea.

Purpurea flore pleno—Double purple.

Alba flore pleno—Double white Althea.

Rubrum—Single red Althea.

Purpurea—Single purple Althea.

Alba—Single white Althea.

Althea—Striped.

Althea—Pink and white.

Althea—White and crimson center.

Flore pleno Variegata—A variegated leaved, double flowering.



HYDRANGEA ARBORESCENS

HYDRANGEA

Hydrangea Arborescens Sterilis (Hills of Snow)—This variety has a whiter bloom than the *Paniculata*. It also blooms earlier. So far, however, it has not quite come up to our expectations, being much weaker in growth.

Hortensis, Otaksa—Of dwarf, dense habit, with large heads of pink or blue flowers. Tender and suitable only for tub culture.

Ramulis pictis—A red-stemmed variety, carrying immense heads of deep rose or light cherry flowers.

Thomas Hogg—Great flower-heads of purest white. Very choice and beautiful. Tender.

Paniculata grandiflora (Panicled Hardy Hydrangea)—Familiar to almost everyone as the most conspicuous shrub in any collection during August and September. Its massive plumes of white flowers bend the branches with their weight, changing finally to pink and bronzy green. The shrub shows to best advantage when grown in rich beds or masses and cut back severely every spring before growth starts. Grown in this way it produces fewer flower-heads, but much finer ones. Sometimes grown in tree form, making a strong, vigorous bush 6 to 8 feet high.

HYPERICUM (St. John's-wort)

Moserianum (Gold Flower)—A showy, half pendulous shrub, growing only a foot or two in height, and fine for massing or for growing in perennial borders, or in front of high shrubbery. Its glossy, bright yellow flowers are two or more inches in diameter and tufted with masses of yellow stamens, blooming in midsummer. May be grown in shaded places where few other plants will thrive.

LIGUSTRUM (Privet)

Besides being one of our best hedge plants, the different species of the Privet form interesting groups on the lawn. They are almost evergreen, and of dense, shapely habit. Their white flowers grow in pretty sprays, are fragrant, and followed by berries of different colors.

Amurensis (Amoor River Privet)—The Chinese variety, hardier than the others, growing 8 to 12 feet high, with dark green leaves, which persist almost through the winter. Evergreen in the South. Bears erect panicles of handsome white flowers in June, followed by black berries. The best for hedges.

Ibota—A fine and hardy border shrub, of spreading habit with curving branches and leaves of grayish green. Pure white flowers in June followed by bluish-black seeds.

Ovalifolium (California Privet)—A species of unusual beauty that has become the most popular of all hedge plants. Its shining leaves give it value for porch and terrace decoration when grown in standard form. Can be sheared to any desired form.

Regelianum—The horizontal, sometimes drooping branches are distinctly beautiful. Has longer and narrower leaves than other varieties.

LINDERA (Spice Bush)

Benzoin—Grows best along the edge of water as it needs moist loamy soil. Has bright yellow fragrant flowers in early spring, before the leaves appear. Makes a handsome specimen plant.

LONICERA (Honeysuckle)

The honeysuckles have bright and fragrant flowers, followed by showy berries. They are all of attractive and fast-growing habit and grow well in any soil.

Tartarica Red (Tartarian Honeysuckle, Red)—A beautiful shrub. Vigorous, and producing large, bright-red flowers striped with white, in June.

Tartarica White (Tartarian Honeysuckle, White)—A large shrub having large flowers in May and June.

PHILADELPHUS

(Syringa or Mock Orange)

The Mock-Orange is undoubtedly one of the best-known and most popular shrubs, and in spite of the great numbers of new plants which have been introduced, the old Philadelphus holds its own and more freely than ever. It is also known as Syringa in some localities. The shrubs are usually tall, vigorous growers, with large foliage and flowers, and so are valuable for backgrounds, screens, grouping and specimens. Their flowers are very sweet-scented, milk-white, in most cases, and beautiful for cutting.

Coronarius (Garland Syringa)—A fine old form, 8 to 10 feet tall, that blooms among the earliest and in very graceful sprays. Its large, showy flowers are delightfully scented.

Aureus—A striking shrub of medium size, with golden yellow leaves that remain bright through the season. Valuable for contrastive grouping.

Alba flore pleno—Has partially double, highly fragrant flowers.

Grandiflorus—The most vigorous species of the group, growing 10 feet high. Its long, irregular branches are clustered with large, slightly fragrant flowers in June.

Gordonianus—Strong-growing, 8 to 10 feet tall, and large-flowered; valuable for its late-blooming season in July.

Lemoinei, Boule d'Argent—Of dwarf, compact habit, only 4 to 6 feet high; flowers large and fine; semi-double, blooming in June; very fragrant.

Candelabre—Blooms with remarkable freedom in dense, erect spikes in June. Grows 4 to 6 feet high.

PRUNUS

(Flowering Plum and Almond)

The Flowering Almonds are pretty dwarf bushes that bloom quite early and are very showy in spring. Their slender, leafless, upright branches are entirely hidden by stemless, very double flowers of pink and white.

Triloba fl. pl. (Double-flowering Plum)—A charming shrub or small tree, 3 to 5 feet high, of spreading, vigorous growth. Very early in spring before its leaves appear the whole tree is decked in a fleecy cloud of very double, light pink blossoms. Its effect on a still leafless landscape is very bright.

Pissardi—See Trees.

PYRUS

Arbutifolia (*Sorbus arbutifolia*. Red Chokeberry)—An upright shrub, 6 to 12 feet high, white or tinged red flowers in April and May followed by dull red, pear-shaped fruits $\frac{1}{4}$ inch in diameter. Distinctly ornamental both in flower and fruit.

RAMANAS ROSES

Rosa Rugosa—This plant belongs to the Rose family, but it is so eminently suitable for planting among shrubs that it is included here. It has shiny, crinkled leaves, and showy single flowers that are followed by bright red hips the size of crab apples. There are pink and white varieties.

R. rubiginosa (Eglantine, Sweetbrier). Prized for the delightful aromatic fragrance of its foliage.

RHAMNUS (Buckthorn)

Catharticus—The dark foliage masses of this dense, twiggy bush are relieved by masses of attractive white flowers in June and July. They are followed by showy black fruits. A good hedge plant. Grows 6 to 10 feet high. Will stand shearing well.

RHODOTYPUS

Kerrioides (White Kerria)—An attractive shrub of medium growth, with single white flowers late in May.



PURPLE FRINGE OR SMOKE TREE

RHUS

Cotinus (Purple Fringe or Smoke Tree)—A unique spreading treelike shrub with large leaves. These are overhung in midsummer by cloud-like masses of very light, mistlike flowers, having the appearance of smoke. Foliage changes to brilliant shades of yellow and red in autumn.

Glabra (Smooth Sumac)—Growth of treelike nature with open crown. Flowers in July followed by crimson or brown fruit clusters. Foliage colors beautifully in autumn. Fine for massing.

Laciniata—Also of treelike form with deeply cut leaflets producing a fern-like effect, which turns to rich crimson in fall.

RIBES (Currant)

Aureum (Golden Currant)—Fragrant yellow flowers in early spring, followed by dark brown fruits.

Sanguineum (Red Flowering Currant)—A large, upright shrub with red bark and twigs, reddish purple flowers borne in long racemes in early spring.

ROBINIA (Acacia Locust)

Hispidia—An elegant shrub with light green pinnate leaves and long, graceful clusters of pea-shaped, rose-colored flowers in June, often throughout the summer.

Neo-Mexicana—A similar shrub of more vigorous growth with bright red flowers and longer compound leaves with 15 to 21 leaflets.

SAMBUCUS (Elder)

Nigra, aurea (Golden Elder)—Contrasted with other shrubs, the golden yellow leaves of this Elder give heightened effects in tone and color. Flowers white, in flat-topped cymes in early summer. It can be pruned into a neat, compact little bush, or grows naturally to 10 or 15 feet.

Variegata (Variegated Elder)—Leaves are quaintly mottled with white and yellow. Flowers and growth like the type.

Laciniata (Cut-leaved Elder)—The leaves of this variety are fernlike in formation, and the shrub is of half-drooping habit. One of the finest in cultivation, being especially effective in masses. Grows 8 to 10 feet.

SPIRÆA

Arguta (Snow Garland)—A slender dwarf, 3 to 5 feet high, with branches a snowy mass of clear white flowers in early May.

Bumalda—A spreading, low bush, but 2 feet high with dark leaves brightened by corymbs of pretty, light pink flowers in May, and at intervals all summer.

Anthony Waterer—A new form of better habit than the type, with larger corymbs of rosy crimson.

Billardi—A narrow, dense shrub, 6 feet high, with dense panicles of rich pink flowers in July and August, also in fall.

Callosa alba (**S. Japonica**, of some)—Of compact growth, 4 feet high, with upright branches and bluish green foliage; crowded with large, flat clusters of white flowers nearly all summer.

Atrosanguinea—Dark red or rose flowers in June and July.

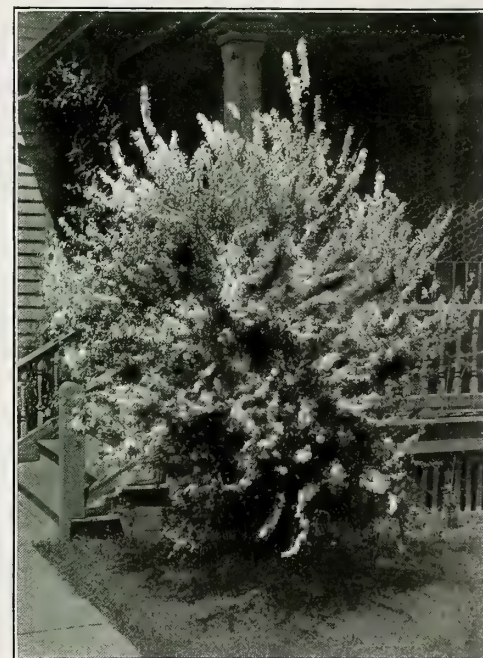
Reevesiana (Reeves' Double Spiræa)—Tall and graceful, 5 to 8 feet high, with dark, bluish green lance-like foliage, and large, pure white double flowers in May and June.

Douglasi—Upright in growth to 5 or 7 feet, with reddish brown branches and narrow, oblong leaves. Bears spikes of beautiful, deep rose-colored flowers in July and August.

Opulifolia—This and the next are sometimes classed under *Physocarpus* or *Ninebark*. They make a much stronger growth than most sorts, growing rapidly upright to 10 feet, although their branches droop when laden with their great weight of white flowers.

Aurea—Tall-growing shrub. The leaves are bright yellow in spring, gradually changing to golden brown in fall. Flowers double white.

Prunifolia, flore pleno (Bridal Wreath)—Among the earliest of the double spiræas to bloom, very graceful and plume-like in effect, branches being covered thickly almost their whole length with small, double white flowers, and sweeping outward in gentle curves.



SPIRÆA PRUNIFOLIA (Bridal Wreath)

Thunbergii (Thunberg's Spiræa)—Distinct and most attractive at all seasons, with feathery masses of pure white flowers in early spring; in autumn its narrow leaves change to bright red and orange. Forms a dense, feathery bush.

Van Houttei (Van Houtte's Spiræa)—One of the most charming and beautiful of the Spiræas, having pure white flowers in clusters or panicles about an inch in diameter. Astonishingly profuse in bloom and plants remarkably vigorous and hardy. A grand shrub for planting singly or in groups, or as a banking against buildings.

SYMPHORICARPOS

Racemosus (White Snowberry)—A well-known shrub with small pink flowers and large white berries that will remain on the plant through part of the winter. The white berries are the most attractive characteristic of the shrub.

Vulgaris (Red Snowberry, or Indian Currant)—Similar to the White Snowberry, except that the berries are smaller and red in color. The habit is of slightly drooping nature and of vigorous growth. Succeed in shady places.

SYRINGA (Lilac)

The lilacs appear to best advantage when massed in groups. They are easily transplanted any time between fall and spring. Rich, moderately moist soil suits them best.

Japonica (Japan Tree Lilac)—The only tree-form in the group, growing to a height of 30 feet, exceedingly handsome when in bloom, and valuable for prolonging the lilac season well into June and July. The leaves are leathery, large and dark. Flower plumes 12 to 15 inches long, white and showy.

Josikaea (Hungarian Lilac)—A variety of fine habit, is valuable for its late bloom. Flowers lilac purple, large. Late in June.

Persica (Persian Lilac)—A fine old species with slender branches and narrow leaves, dwarf in habit. Its pale lilac flowers are very fragrant.

Persica, alba (White Persian Lilac)—Of similar habit, with white flowers.

Vulgaris (Common Purple Lilac)—The familiar species of all fine old gardens, with heart-shaped leaves and dense panicles of lilac flowers in May, still the most fragrant of any.

Alba (Common White Lilac)—Similar to the former, with pure white, very fragrant flowers.

SINGLE LILACS

The single Lilacs below all grow 6 to 8 feet high and bloom in May.

Alba Grandiflora—Very large white flowers in heavy panicles.

Charles X—Of exceptionally strong, rapid growth; large, shining leaves and rather loose trusses of reddish purple flowers.

Marie Legraye—The great forcing Lilac. Flowers pure white, in large panicles.

Rubra de Marley—Rich, rosy purple flowers.

TAMARIX (Tamarisk)

The Tamarisks are hardy shrubs of strong but slender, upright, spreading growth. Their foliage is as light and feathery as asparagus, and they are valuable for planting near the seaside.

Africana (*T. parviflora*)—Bright pink flowers in slender racemes in April and May. Shrub is 15 feet tall, and is very showy with its reddish bark.

Purpurea (*T. tetandra purpurea*)—Grows to 12 feet and has purplish pink flowers in May.

Chinensis—Flowers pink, in large, loose, usually nodding panicles; often 15 feet high.

Gallica—Delicate pink or white flowers in slender-panicked racemes in spring or early summer; leaves bluish green. Grows to 15 feet high.

Indica—Pink flowers in longer, more wand-like sprays. Foliage is dull green.



VIBURNUM OPULUS (Cranberry Bush)

VIBURNUM

Opulus (Cranberry Bush)—A very decorative native shrub, growing 8 to 10 feet high, with white flowers in May, followed by scarlet fruits.

Sterilis (Snowball)—Well known; even more showy than the type when covered with its great clusters of white flowers.

Tomentosum, plicatum (Japan Snowball)—Of better habit than the familiar older form, with handsome, plicate leaves and more delicately formed, whiter flowers in clusters 4 inches across in May and June; red fruit.

Climbing and Trailing Vines

AKEBIA

Quinata—A beautiful, hardy Japanese vine, with unique foliage and chocolate-purple flowers of delightful fragrance in large clusters. The foliage is never attacked by insects.

AMPELOPSIS

Quinquefolia (Virginia Creeper)—The well-known native, with five-parted leaves that change to rich scarlet in fall. Berries black-blue. Entirely hardy anywhere; quick-growing; usually requires some support on walls, although it climbs by means of tendrils and clings to brick and stone surfaces.

Veitchii (Boston Ivy)—A beautiful, hardy Japanese species. One of the finest climbers for covering walls, as it clings firmly to the smoothest surface, covering it evenly with overlapping leaves which form a perfect mass of foliage. The color is a fresh deep green in summer, changing to bright shades of crimson and yellow in autumn. When once established it is quite hardy. Give some protection the first year.

ARISTOLOCHIA

Sipho (Dutchman's Pipe)—A magnificent hardy vine of rapid growth, with very large, heart-shaped leaves and brownish flowers, resembling in shape a miniature pipe. Splendid for archways or verandas, as it is a very rapid grower and forms a dense shade.

CELASTRUS

Scandens (Bittersweet)—A native climber, with handsome, glossy foliage, and large clusters of beautiful, orange-crimson fruits, retained all winter. Very bright in effect, and its graceful sprays of berries are charming for winter house decoration.

HEDERA

Helix—The well-known English Ivy, still the most beautiful covering that can be given to any wall or surface. Leaves of rich green. Plant on the north side of buildings and protect.



MATRIMONY VINE

LONICERA

Brachypoda Aurea Reticulata (Japan Golden-leaved Honeysuckle)—Of vigorous growth, forming radiant festoons and masses with its clear golden leaves; flowers creamy white.

Halliana (Hall's Japan Honeysuckle)—Pure white and creamy yellow, very fragrant flowers; in bloom the whole season. Almost evergreen. Besides its uses as a climber, it is valuable for covering banks, bare places, etc., where grass will not grow.

Sempervirens (Scarlet Trumpet Honeysuckle)—Flowers scarlet and trumpet form.

Semperflorens—Flowers yellowish white and fragrant.

LYCIUM

Chinense (Matrimony Vine)—Sometimes trained as a shrub. Purple flowered and showy-fruited. Extra vigorous in growth. Also good for hedges.

TECOMA (Bignonia)

Radicans (Trumpet Creeper)—A robust, woody vine, climbing high and twining tightly with numerous roots along its stem. Its orange-scarlet flowers cluster at the tips of the branches. Leaves light green.

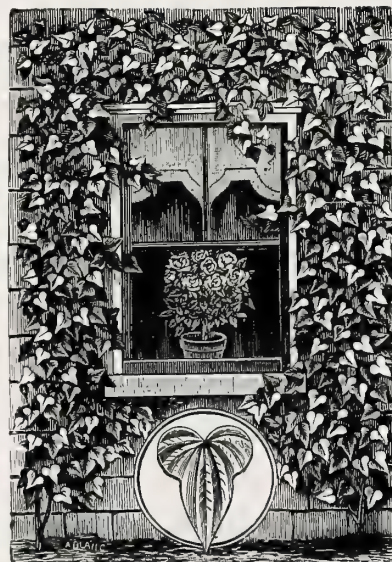
WISTARIA

Magnifica (Purple Wistaria)—Flowers in dense drooping racemes of a pale lavender color.

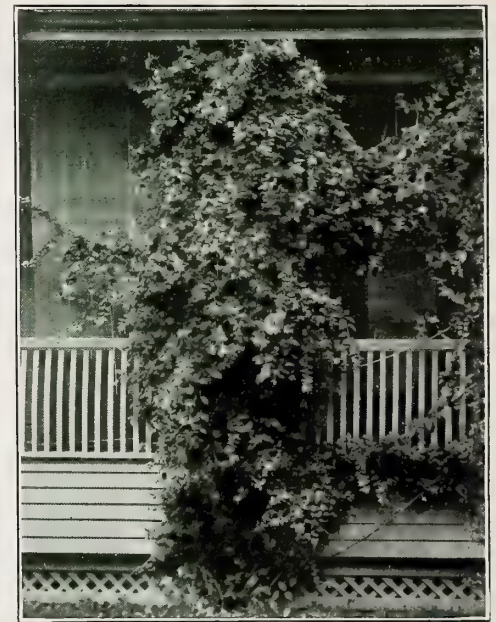
Sinensis, Alba—Differs from the Chinese only in having pure white flowers.

DIOSCOREA (Cinnamon Vine)

Batatas—The odd and quaint Cinnamon Vine, most conspicuous in fall when small tubers cluster in the axils of its dark, glossy, arrow-shaped leaves. The white flowers are small, but fill the air with a delightful cinnamon odor. The beautiful Cinnamon Vine is one of the most charming of climbers and will quickly cover an arbor, window or veranda with a great profusion of vines and sweet-scented flowers, making it a perfect bower of beauty. The vine is a hardy perennial, and once planted will grow for many years and will be a source of constant delight to the possessor. There is nothing which will give a house a more homelike and cozy appearance or be a surer index of refinement and culture, than beautiful vines twining about the porch and trellises.



CINNAMON VINE



LONICERA HALLIANA (Hall's Honeysuckle)

CLEMATIS

Of all the vines used either for shade or decoration, none can compare with the Clematis in its many and varied forms. While the large-flowered kinds are not so good for shade until they attain considerable age, their wealth of bloom makes them the grandest embellishments to the porch known. Of the small-flowered varieties, *Paniculata* undoubtedly holds the lead either as a shade producer or for its abundance of bloom. It is a rampant grower in good soil, and the lateness of its bloom, coupled with the exquisite perfume of its flowers, makes it one of the most desirable of all vines.

Duchess of Edinburgh—Fine white, double flowers.

Henryi—Creamy white; large and of fine shape; a free grower and bloomer.

Mad. Koster—Large, red, very fine. Best of the red flowering.

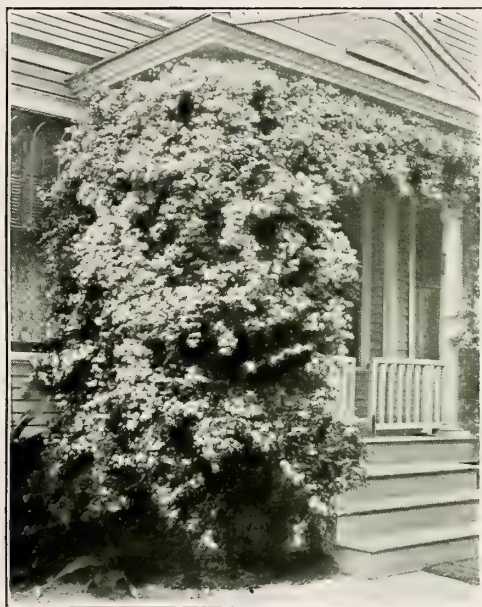
Jackmani—Flowers, when fully expanded, 4 to 6 inches in diameter, intense violet-purple, with a rich velvety appearance, distinctly veined. It blooms continually from July until cut off by frosts. The very best and hardiest variety in cultivation.

Madam Edouard Andre—Has been called the Crimson Jackmani. The plant is a strong, vigorous grower, and very free in bloom. Color a distinct crimson-red. Entirely distinct from all other varieties.

Ramona—A strong, rampant grower and a true, perpetual bloomer, flowers appearing on the last year's growth and on the new shoots, giving an abundance of bloom all through the season. Color deep rich lavender.

SMALL-FLOWERING CLEMATIS

Coccinea—A very handsome, hardy climber, bearing thick, bell-shaped flowers of bright coral-red. Blooms with wonderful profusion from June until frost.



CLEMATIS PANICULATA

Paniculata (Sweet-Scented Japan Clematis)—A Japanese plant possessing unusually attractive merit. A vine of very rapid growth, quickly covering trellises and arbors with handsome, clean, glossy green foliage. The flowers are of medium size, pure white, borne in immense sheets, and of a most delicious fragrance. The flowers appear in September, at a season when very few other vines are in bloom.

Roses



Read the article on roses on page where cultural directions are given.

HYBRID PERPETUAL ROSES

The hybrid perpetuals are among the most valuable of all roses. They are particularly desirable for cold climates, because they are entirely hardy.

The flowers of this class are very double and of immense size (frequently from four to five inches in diameter), delightfully fragrant, and of the most gorgeous and dazzling colors. The plant is a strong, vigorous grower, requiring but little attention, and surviving all ordinary hardships. Though slight protection in winter, in very exposed places, is always desirable, these are the hardiest roses and may be expected to bear any reasonable degree of cold.

When once established, they all bloom freely at the usual time, early in the season, and continue to bloom at short intervals during the summer and autumn months. They are much improved in size and beauty by good cultivation and rich ground.

Baronne Prevost—Pure rose color; very large, with full, flat form; a free bloomer, fragrant, very hardy.

Boule de Neige—Snow-white. The best bloomer among hybrid perpetual roses.

Baron de Bonstettin—Rich, velvety maroon; large and full. One of the finest roses we grow.

Baroness Rothschild—One of the most beautiful of all roses. The flowers are of immense size, perfect form and exquisite color, a rich and lovely shade of pale pink, nearly white; delightfully perfumed. Being very difficult to propagate, it is always scarce and high-priced.

Coquette des Blanches—A finely formed, pure white rose, occasionally shows light flesh when first opening; beautiful shell-shaped petals, evenly arranged. Flowers of good size, perfect, and of fine form and finish. One of the finest and most beautiful of the white hybrids. Very suitable for cemetery planting.

Coquette des Alpes—White, tinged with pale rose; medium size; fine form; free bloomer.

Charles Lefebvre—Reddish crimson; very velvety and rich; large, full and beautifully formed; a splendid sort.

Countess of Oxford—A very large, dark red, rich colored rose.

Duke of Edinburg—Brilliant, scarlet crimson, shaded maroon; very fine.

Dupuy Jamain—Bright cherry red, shaded; large.

Duke de Cazes—Blackish, velvety crimson.

Duke of Teck—Vivid scarlet crimson; one of the finest roses grown.

Duke of Wellington—Bright, velvety red, shaded with blackish maroon, center fiery red; large, full and perfect.

Eclair—Brilliant carmine; an extra fine bloomer, distinct.

Etienne Levet—Carmine; large splendid form.

Eugene Furst—Velvety crimson, shaded with deeper crimson. A large, full flower, a first-class rose.

Francois Levet—A splendid rose, flowering freely and very full; fresh, clear rose, bright and glistening. The flower is large and of fine form.

Fisher Holmes—Most brilliant scarlet to dark red. Velvety, very pretty.

Francois Michelon—Deep carmine rose, very large, full; fragrant and a fine bloomer.

Frau Karl Druschki—The finest white Hybrid Perpetual Rose, with large, full flowers of splendid form. A very free bloomer.



GENERAL JACQUEMINOT

General Jacqueminot—Brilliant velvety crimson; large, showy, and a fine grower; a magnificent variety. One of the most popular sorts grown.

General Washington—Scarlet crimson; very large and fine; not quite as vigorous as General Jacqueminot.

Glory of Waltham—Silvery appearance; large, beautiful and waxy.

Jean Cherpin—Violet plum; cupped; fine.

Jean Soupert—Dark plum; large, full and fine.

John Hopper—Bright rose; large and full. A profuse bloomer and a standard sort. Free grower.

Jules Margotten—Bright cherry red; large and full; a truly beautiful rose.

Leopold Houseman—A very choice rose, deep crimson, large, with fine lobes; new.

Louis Van Houtte—Bright rose carmine; full; very large; fine globular form; deliciously perfumed.

La France—Silver rose color; large and full; a constant bloomer; fine scented.

Lady Arthur Hill—Brilliant red; large, showy, profuse bloomer.

Mabel Morrison—A sport from Baroness Rothschild; flesh white, changing to pure white; in the autumn tinged with rose; double, cup-shaped flowers, freely produced.

Madam Plantier—Pure white; large and double; blooms abundantly in clusters; very fine, hardy rose.

Madame Charles Wood—Deep rosy crimson, sometimes brilliant scarlet; very large and fine form. An early, constant and free bloomer.

Madame Lacharme—White, sometimes faintly shaded with pink, moderately large. A free bloomer in spring.

Madame Victor Verdier—Brilliant carmine crimson; large, full, beautiful shape; a free bloomer and very fragrant.

Magna Charta—Bright, rosy pink, flushed with carmine; very large, full and double; fragrant.

Marie Bauman—Brilliant carmine crimson; large, full and of exquisite color and form; very fragrant.



MARSHALL P. WILDER

Marshall P. Wilder—Cherry carmine; continues in bloom long after other varieties are out of flower. The finest hybrid perpetual rose yet produced. (See cut.)

Merveille de Lyon—Pure white, shaded and marked with satiny rose; flowers very large, double and of a beautiful cup shape; a superb variety; moderate grower.

Mrs. John H. Laing—As a bedding rose this is undoubtedly one of the best varieties yet introduced, being hardly ever out of bloom all summer. Color a beautiful shade of delicate

pink; of large size and very fragrant. It is also a good forcer from January onwards. Perfectly hardy.



PAUL NEYRON

Paul Neyron—Deep rose color; good tough foliage; wood rather smooth; by far the largest variety in cultivation, often producing blooms five inches in diameter. A free bloomer; very desirable as a garden rose; valuable for forcing. Vigorous. (See cut.)

Perle des Blanches—Pure white; medium size, good form; fragrant.

Pierre Notting—Blackish red; shaded with velvet; globular in form; very large and full, and one of the finest dark roses.

Persian Yellow—Fine, yellow, sweet-scented rose; vigorous grower, fine foliage.

Prince Camille de Rohan—Deep velvety crimson; very large, moderately full. A splendid rose.

Sir Rowland Hill—New. A grand deep crimson flower, distinct from all other varieties; very fragrant; matchless in beauty and a perpetual feast of joy to every grower. The best bloomer we propagate; always gives entire satisfaction.

Ulrich Brunner—Flower very large and full; color, cherry red; beautiful, large shell-shaped petals. Extra fine.

White Baroness—Pure white; hardy; late bloomer; beautiful.



BABY RAMBLER EVER-BLOOMING ROSE
From a True Photograph

BABY RAMBLER ROSE (Mme. Levvasseur)

The discovery of the Baby Rambler Rose has created a sensation among all who enjoy the beauty of the queen of flowers—the rose. It originated at Ussy, France, and is a sport of the Crimson Rambler, color rosy red. It is strictly a bush rose of thrifty growth and blooms profusely during the entire summer, from June until late in the fall. It is the only rose in cultivation that blooms all summer, bearing large clusters of beautiful, rosy red flowers, often as many as fifty or more flowers on one single stem from young shoots. It is the most prolific bearer of any rose grown. For indoor or window gardening it gives entire satisfaction, and under favorable conditions will bloom all winter. It may be taken up out of the garden in the fall for winter blooming, after the wood has ripened up, and transplanted into large pots for window gardening; or it may be used for winter blooming and again transplanted out in the garden in the spring. In either case, after transplanting, the branches should be cut back to short stubs 3 or 4 inches long. They thrive best in very rich soil. Cutting back all the wood to short stubs 4 or 5 in. long each spring is absolutely necessary to insure heavy blooming.

White Baby Rambler Rose (Madam Zeimet. New)—Similar in every respect to Baby Rambler except the color, which is pure white.

For bedding purposes the two make a splendid combination. Perfectly hardy; however we recommend some protection by covering with leaves during winter. This valuable new rose furnished a continuous crop of flowers the entire summer.

Crimson Baby Rambler—A compact bush about 2 feet high, with broad clusters of crimson flowers like those of the Crimson Rambler. One of the finest bedding roses ever introduced.

A BLUE ROSE

The long-looked for novelty an accomplished fact.

Veilchenblau (Violet Blue)—The new Rambler, "Veilchenblau" (Violet Blue), which is hailed by the German rose growers as the forerunner of a genuinely cornflower blue rose, is a seedling of Crimson Rambler. The blossoms, massed in large umbels, are semi-double, of medium size. The color, on first unfolding, is either reddish pink or purplish pink, then turns amethyst, and finally steel blue as the flower fades. The general color impression is that of the March violet. The yellow stamens appear in sharp contrast to the blue petals. The plant is vigorous in growth, with shining green foliage and few but sharp thorns. So far it has not suffered from mildew and is considered one of the most hardy ramblers.

CLIMBING ROSES

Among these beautiful climbing plants, the Ramblers rank first. The perfect hardiness of this class of roses, their strong growth and luxuriant foliage, adapt them for covering arbors, walls, trellises and unsightly objects; which together with their immense clusters of beautiful flowers commend them to all lovers of the beautiful. The pruning consists of cutting back one-third of the previous year's growth.

Baltimore Belle—Pale white; very double, flowers in beautiful clusters; one of the best white climbers.

Gem of the Prairies—A valuable Hybrid. Is a cross between Mad. Laflay and Queen of the Prairies; bright red, blotched with white; large, very double and fragrant.

Seven Sisters—Vary in color from blush to crimson; blooms in large clusters.

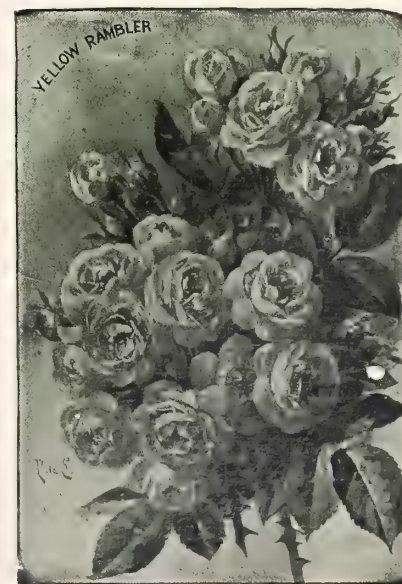
Queen of the Prairies—Bright, rosy red, striped with white; large and cupped; most beautiful and valuable of the class.

Russell's Cottage—Rich crimson, medium size; very double and full; blooms abundantly.

Crimson Rambler—This is the most decided novelty in roses we have had for years. Introduced from Japan in 1893, it has been a source of wonder and admiration wherever exhibited. The plant is a vigorous grower, making shoots from eight to ten feet long in a season. A charming pillar rose; for covering trellises or buildings there is nothing finer. The flowers are grown in great pyramidal panicles, each carrying thirty to one hundred blooms and over; the individual flowers are one to one and one-half inches in diameter and remain in perfect condition for a long time. The color is bright, vivid crimson, showing none of the purplish tint so commonly seen in crimson roses.

Ever-blooming Climbing Crimson Rambler Rose (New. Flower of Fairfield)—The latest triumph in rose production. A scientific wonder in the art of hybridization. The only ever-blooming climbing rose in cultivation. Similar in color, hardiness and thriftiness to Crimson Rambler, and produces a continuous crop of roses in large clusters during the entire summer season from July till frost. This wonderful acquisition is now offered by us for the first time. Our stock comes direct from the originator in Europe.

Tausendschoen—New, from Germany. The most prolific bloomer of any rose yet introduced; bears in heavy clusters like Crimson Rambler, flowers larger and fragrant, color pink, very hardy and rapid grower. Winner of German Horticultural Prize.



YELLOW BABY RAMBLER

Yellow Rambler (Aglaia)—A yellow hardy climber. It is a blood relation to the Crimson Rambler, which it much resembles in growth and foliage. It also blooms after the same manner as the Crimson Rambler, in large trusses. The plant is a very vigorous grower, making shoots 8 to 10 feet high in one season after becoming well established.

White Rambler (Thalia)—Resembles Crimson Rambler in foliage and habit of growth; flowers pure white in large clusters.

HYBRID TEA ROSES

A beautiful class of half hardy roses, combining the free flowering qualities of the Tea class with the rich coloring and to some extent the hardiness of the Hybrid Perpetual. Though not as hardy as the Hybrid Perpetuals, they are much hardier than the Teas, and will stand out during winter wherever the Bourbon will and where the Teas would be killed to the ground. They should be slightly protected with leaves during the winter.

La France—Delicate silvery rose, changing to a silvery pink; very large, full; of fine globular form; a most constant bloomer. The sweetest and most useful of all roses; none can surpass the delicacy of its coloring. Free grower.



GLOIRE DE DIJON

Gloire de Dijon—A combination of salmon, orange and buff; flowers large and of good, globular form. Half hardy. Pinching off the ends of the vigorous shoots of this rose, as they grow, will compel the buds along the shoots to grow out, and each bud will then produce a large, fine flower. This is a grand pillar rose on account of its rapid growing habit. It should be layered in winter the same as all Hybrid Teas and covered with leaves.

Hermosa—Light rose; large, full and double; blooms profusely in clusters. One of the best.

Madame Schwaller—A variety of great freedom in bloom. Color rosy flesh, paler at the base of the petal, and deeper on the edges. Globular when opening, becoming cupped when expanded. Of bushy growth, and very free flowering. A valuable variety for pot culture; very fragrant.

Meteor—A rich, dark, velvety crimson, free-blooming rose, as fine in color as the best of the Hybrid Perpetuals; the flowers are of good size, very double, and perfect in shape, either as buds or when fully opened; the plant is vigorous and remarkably free flowering. A splendid sort for pot culture, and the best of all the Hybrid Teas as a bedding variety for summer cut flowers, as it retains its color well even in the hottest weather, with no shade of purple to mar its beauty.

Pierre Guillot—Bright, dazzling crimson passing to brilliant carmine; flowers large, very double and full, and highly scented; a healthy and vigorous grower, and a constant bloomer from June till frost. The outer petals are broad, round and decidedly recurved, showing the short, closely set inner petals.

MOSS ROSES

This division of roses embraces many of the most desirable qualities. The fine mossy buds, large fragrant flowers and perfect hardiness, make it a universal favorite. The soil for this class of roses is benefited by an application of well-rotted manure and a moderate pruning.

Comtesse de Murinais—Pure white; large; very desirable; the finest white moss.

Crested—Deep pink buds, surrounded with mossy fringe. Very beautiful, and free from mildew.

Luxembourg—Deep crimson; fine grower.

Princesse Adelaide—A vigorous grower; pale rose, of medium size and good form; good in bud and flower.

PERPETUAL MOSS ROSES

This class embraces those varieties of Moss Roses that bloom several times during one season.

Blanche Robert—Flowers pure white, large and full; buds very beautiful; a rampant grower, being almost as vigorous as a climber.

Daniel de Paul—Very dark, blackish carmine; full, with good form; one of the best bloomers of this class.

Madame Edouard Ory—A moderate grower of medium to large size; full.

Salet—A vigorous grower and free bloomer. Light rose, large, full. The best of the class.

Perpetual White—Pure white; produces very few flowers.

POLYANTHA ROSES

These are sometimes called "Fairy" Roses because of their small flowers, which are yet full and regularly formed, with colors as fine as the larger Teas. Usually they are borne in great clusters, which, together with their neat, hardy, everblooming habit, make them valuable for bedding.

Clothilde Soupert—A grand free-flowering rose; fine for bedding out or pot culture. The flowers are very double and handsomely formed, with outer petals pearl-white, shading to a center of rosy pink.

Mignonette—Clear pink flowers, changing to white; very double. Young shoots frequently carry from 40 to 60 flowers.

Mosella (Yellow Soupert)—A valuable new Polyantha. Dwarf and bushy, a mass of bloom the whole year. Color light yellow, shading to white at edge of petals. Quite hardy; will stand the severest winters with but slight protection.

Pink Soupert—An excellent pink rose, surpassing even Clothilde Soupert in freedom of bloom. Strong, healthy grower, and a fine, hardy bedding rose. Dainty and effective.

HYBRID NOISETTE ROSES

This is a group of considerable importance. They generally flower in small clusters, and bloom freely throughout the year. The flowers are mostly white, and though small are generally of good form. They require a little more care in their protection than the Hybrid Perpetuals.

Coquette des Alpes, vig. or free. (Lacharme, 1867.) White, slightly shaded with carmine; medium size; form semi-cupped; wood long-jointed; larger flowers than the others. The strongest grower of the entire class.

Coquette des Blanches, vig. or free. (Lacharme, 1872.) Pure white, sometimes faintly tinged with pink; flowers of medium size, somewhat flat, but full and very pretty; growth more bushy and symmetrical than any of the others. One of the hardiest. Later than the rest in coming into flower.

TREE ROSES

For certain forms of gardening, a rosebush trained in tree form is most desirable. They are grown as small trees, 3 to 4 feet high, with a round head, and, when covered with the magnificent flowers they bear, are indeed unique and beautiful. The following varieties are the best adapted to this form of growing:

Crimson Rambler. Crimson.

Dorothy Perkins. Pink.

Baby Rambler. Crimson.

Frau Karl Druschki. White.

Ulrich Brunner. Cherry-red.

General Jacqueminot. Brilliant crimson.

Mrs. John Laing. Soft pink.

Selected Hardy Perennials

From a long list of hardy herbaceous perennials, we select the following as being the choicest and most satisfactory for ornamental gardening. We advise either late fall or early spring planting in very rich soil, deeply worked. For an effective border, use plants of the same variety and color as much as possible. Perennials are most effective if planted in groups along the borders of mass plantings of shrubbery so as to blend into the surrounding groups with pleasing contrast.

Perennials die to the ground in winter and grow up again early in the spring. The stalk increases in size with each year, and in most instances needs to be dug up after four or five years and replanted after the stalks are separated. Several varieties mentioned are especially adapted for borders. We mention height of growth so as to aid in making selections for certain effects. Further information, if desired, on the subject of hardy herbaceous plants, will be cheerfully given.

Acanthus, Spinousus (Bear's Breech)—Grows 1½ ft. A hardy and exceedingly decorative plant with handsome foliage and showy flowers. Native of Europe. Leaves about two feet long and a foot wide, with deeply incised and toothed segments. Flowers rosy purple, in tall spikes during late summer. The Acanthus leaf has been widely copied in art and appears in more or less conventionalized form in many classic designs.

Achillea (*Achillea ptarmica flore pleno*, The Pearl)—"Double-flowered white tansy." A free-flowering herb with a profusion of small double white flowers almost throughout the season. It is a garden form of the European White Tansy, and grows one to two feet tall. It is very valuable for cut flowers, and on account of its remarkable floriferous character is one of the most popular of hardy perennials.

Anemone (*Anemone Canadensis*, *A. Pennsylvanica*. Canadian Wind-flower)—A very hardy, showy species, spreading rapidly by underground root-stocks. Leaves rich green, borne on long petioles, with 3 to 5 cleft and toothed divisions. Flowers white, profusely borne in early summer. Splendid for ground cover in the shrub border or for colonizing in open moist woods. Height 1 to 2 ft.

Aquilegia (The Columbines)—Many colors. Graceful hardy herbs with branched stems terminated by showy, mostly nodding flowers. They are delightful plants with compound glaucous-green leaves. They thrive best in moist, loamy soils, fully exposed to the sun.

Aster (The Michaelmas Daisies)—Many varieties, grows 2 feet. The showy perennial Asters are becoming more and more popular as garden plants, both on account of their beauty and the wealth of blossoms which are produced so late in the season, when other flowers are often past. They are of easy culture in ordinary soil and conditions, and are hardy and desirable.

Astilbe (*Japanese Astilbe*, *Astilbe japonica*. August bloomer)—A hardy border plant with clustered stems 1 to 3 feet tall. Native of Japan. Leaves compound, consisting of several bright green serrate leaflets. Flowers white, disposed in a broad racemose panicle. A charming and graceful perennial, perhaps most familiar to us as a greenhouse plant.

Bocconia (*Bocconia cordata*. Plume Poppy)—Beautiful hardy plants with large foliage which produces a picturesque effect. An attractive

plant growing 6 to 8 ft. high, and long spikes of white flowers in August. Well adapted for single lawn specimens, or for the subtropical garden.

Campanula (*Campanula carpatica*. Carpathian Harebell)—A charming little plant growing in dense tufts about 6 to 12 inches high. Native of the Carpathian mountains of Austria. Leaves dark green, ovate or heart-shaped, with coarsely-toothed margins. Flowers large, often an inch or more across, varying from white to deep blue. Very free flowering, producing blossoms almost throughout the summer.



HARDY CHRYSANTHEMUMS

Chrysanthemum (The Hardy Pompon Chrysanthemum)—Various colors. The lateness of the blossoming period of these hardy plants, which occurs when other subjects of the garden have been destroyed by frost, commends them and accounts for their universal popularity. The earliest frosts of autumn do not materially affect the blossoms, and even in late fall or early winter their bright and showy flowers lend a cheerful aspect. They thrive in almost any garden soil, and although quite hardy, are benefited by a light covering of litter or leaves in the winter.

Delphinium (The Larkspur)—Blue flowers, grow 3 ft. Very beautiful hardy plants with lobed or divided rich green leaves, and showy flowers in large racemes or panicles. They are universally admired and of easy culture. A deep, rich, loamy soil with sunny exposure is best adapted to their requirements.

Dicentra, or Dielytra (Bleeding Heart)—A very handsome plant with finely divided glaucous leaves, of graceful fern-like aspect. Grows naturally from Western New York southward to Georgia. Flowers heart-shaped, deep rose, nodding in slender scape-like racemes. A charming dainty species, attaining a height of 12 to 15 inches, and blossoming at intervals from spring until autumn.

Digitalis (Foxglove)—Many colors. Stately and handsome, the Foxglove possesses the dignity and atmosphere of the old-time garden, and yet has lost nothing in the competition and progress of more modern garden plants, which in vain would rival it. The stems vary from 2 to 3 ft. in height, densely leafy at the base, bearing long spire-like racemes of large, drooping flowers, which vary from white to purple, usually more or less spotted.

Eulalia (Hardy Grasses)—Several varieties, grows 3 to 4 ft. These beautiful hardy grasses are deserving of the highest commendation. For the garden they are invaluable, being very showy and ornamental, and of easy cultivation. They should be in every collection.

Funkia (*Undulata*)—Silver-leaved, lavender flower, fine for border, grows 12 in.

Funkia—Golden-leaved.

Gaillardia (Blanket Flower)—A genus of very ornamental hardy plants. Flowers yellow or purple, 2 inches across, single on naked stems. Very showy. Early summer until autumn.

Hollyhocks—Many colors, hardy, grow 3 to 4 ft. A collection of fine double sorts.

The Iris—The grand and royal colors of the flowers of these superb hardy plants, so often softly blended or else intensified in various lines or marks, are not surpassed by those of any garden subject. They are invaluable in the herbaceous borders, both on account of their hardiness and easy culture, and for the lavish wealth of blossoms that crown their numerous stems. A sunny situation in moist, rich loam is best adapted to their requirements, and as the clumps increase in size, liberal enriching of the ground or even replanting, will result in a great gain in the size and number of the flowers.

Iris—German. Many colors. Grows 18 inches. Hardy and productive.

Iris—Japanese. Leaves 12 to 18 inches long, bright green, much overtopped by the strong,

stout stems, which are 2 to 3 ft. tall. Flowers very large and showy, 6 to 8 inches across, white and of various shades of blue, violet, lavender and purple. They are among the most beautiful of flowering plants, rivaling even the orchids in their rich tints and markings. Native of Japan. We offer a superb collection of mixed varieties, including a wide range of colors.

Lychnis (Maltese Cross)—A charming old-fashioned flower with the petals arranged in the form of a maltese cross. Stems tufted from a leafy base, 2 to 3 ft. tall, producing compact terminal heads of brilliant orange-scarlet flowers throughout the summer. Very free-flowering and desirable. Probably of Japanese origin.

Paeonia—These magnificent plants are among the showiest and choicest in our gardens. They are grand, and like the roses, are practically indispensable. The fragrance and delicate tints and shades of their beautiful flowers commend them, and combined with all these noble traits, they are absolutely hardy and of the easiest culture. Paeonies thrive best in a deep moist loam, well enriched, with full exposure to the sun. The plants should be set two or three inches below the surface of the ground, and are benefited by an annual top dressing of compost. We offer a superb collection of varieties in separate colors or mixtures in both single and double forms.

Phlox, Subulata—For edging, white and rose, dwarf, very early. These are justly esteemed as the finest of herbaceous plants. They are of dwarf habit, perfectly hardy, of very easy culture, and yield a profusion of bright, showy bloom. They are hardly equaled by any other hardy plant for the decoration of the garden.

Phlox—Many varieties, grows 3 ft. The beautiful Phlox are universal favorites and rank among the showiest of garden plants. The great profusion of the showy flowers and the huge size of the panicles of the tall-growing forms, are features that few perennials can parallel. They are very hardy, and of easy culture, thriving best in moist, fertile loam. There are numerous species and varieties, differing in habit, time of blossoming and color of flowers.

Platycodon (Chinese Bell-flower or Balloon Flower)—Very hardy and floriferous, and one of the extra good perennials. Stems 1 to 2 ft. high, much branched, of dense habit. Leaves lanceolate, sharply and irregularly toothed, flowers blue or white. Native of China and Japan.

Pyrethrum (Giant Daisy)—A fine plant, bearing white flowers with a yellow disk in profusion. Height 4 to 5 feet. September.

Rudbeckia (Golden Glow, or Summer Chrysanthemum)—A very showy, hardy perennial with double golden yellow flowers. Stems 4 to 6 ft. tall, leafy up to the inflorescence. Leaves bright green, deeply 3 to 5 lobed. Flowers very full and double, borne in great masses in late summer. A very popular free-flowering plant. There are many varieties.

Salvia (Hardy Sage)—Many colors; grows 1 to 2 feet.

Spiraea (Meadow Sweet)—Comes in many varieties; among the most ornamental and valuable of herbaceous plants, and of easy culture; flowers deep rose, in large heads; of a robust habit; contrasts finely with *Ulmaria* fl. pl.; 2 to 3 feet.

Stokesia (Stokes' Aster)—A rare hardy plant of surpassing beauty. Stems branched, 1 to 2 ft. high, very leafy at the base. Flowers blue or purplish blue, 3 to 4 inches across; resembling a China Aster. The leaves are of a rich green color, gradually diminishing in size up the stem, the uppermost almost clasping. Grows naturally in South Carolina and Georgia.

Dianthus (Sweet William and Garden Pinks)—In variety. These charming old-fashioned gems are not only favorites in our gardens, but they combine so many attributes of merit, such as hardiness, beauty and free-flowering qualities, that we confidently recommend them to all planters. They thrive in warm loamy soils, preferring sunny exposures. They are very valuable for border planting and rockeries.

Tritoma (Red-hot Poker)—Splendid late-blooming plants; flower stems 3 to 4 ft. in height, with spikes a foot or more in length, of rich, pendent, orange-red and scarlet tubulous flowers. Require a slight covering in winter.

Trillium (Wood Lily)—Very effective and showy, early flowering native plants, deserving a place in every garden. Grows 6 to 9 inches.

Yucca Filamentosa (Adam's Needle)—A stately plant with stiff evergreen foliage. Flowering stems 4 to 6 ft. tall, branched near the summit and bearing numerous drooping creamy-white flowers in summer. The great profusion of the large, showy blossoms, so majestically borne, lends a bold and imposing aspect. Every garden should have this grand hardy species. Grows naturally from North Carolina to Florida and Mississippi.

Bulbs for Spring Planting

CANNAS

Stately and highly ornamental plants, growing from five to ten feet high; and forming one of the most beautiful and striking objects for the lawn and for large circular beds. Cannas should be planted early in spring in rich soil, deeply dug and heavily manured. The roots should be preserved in dry sand or sawdust during the winter.

Ehemanni—The most distinct of all Cannas, on account of its large, oval, soft green leaves and carmine-red flowers, which are produced on long flower stems, each stem producing from 12 to 15 large, drooping flowers. The flowers are as large as *Gladiolus*, and are used to advantage in bouquet making. This is one of the most striking and desirable Cannas ever introduced and cannot be too highly recommended.



CANNA GIGANTIC

Gigantic—Perhaps the best of the tall-growing Cannas. Leaves very large and of a reddish color; flowers crimson red. One of the most rapid growers. They have a decidedly striking appearance. (See cut.)

Nouttoni—Is quite distinct from *Ehemanni* in coloring, being a rich shade of crimson-scarlet. The flowers are very large, growing erect instead of drooping. The foliage is of a brilliant bluish-green, growing very compact, and remarkably free-flowering, forming nearly solid masses of rich, warm coloring. The plant does not exceed six feet in height.

Flaccida—This beautiful little native, found in the swamps of Florida and other Southern

states, is one of the most effective of all Cannas for gardens. The flowers are three or four inches long, and are a delicate lemon-yellow color with a peculiar crimped or waved margin, giving a most pleasing effect. It blooms nearly a month earlier than the other Cannas.

LARGE FLOWERED DWARF CANNAS

Nothing can be more effective for grouping on lawns or for large beds in parks than these ever-blooming Cannas. They commence to flower in a short time after planting and are a mass of gorgeous colors until stopped by frost in fall. When grown as pot plants they are beautiful specimens for the porch in summer and continue to bloom all winter if taken into the house or conservatory. The tubers should be dug up in the fall after the first frost and put away in a cool cellar in dry sand or sawdust for winter storage.

Duchess de Mortemart—Broad, deep green foliage; large, well rounded flowers; deep canary yellow, heavily spotted and flaked crimson.

Egandale—One of the finest dark-leaved varieties. Foliage dark maroon and green; of erect habit; very compact; throwing up numerous heads of bloom; color bright cherry red.

Francois Crozy—This variety is identical with *Mad. Crozy* in habit and general style of growth; flowers bright orange, bordered with a narrow edge of gold; one of the most desirable shades.

Felix Crouse—Plant strong grower, four to five feet high; foliage deep green; flower spikes very numerous; deep scarlet.

Geoffroy St. Hilaire—Rich bronze-purple foliage, and large, well-shaped flowers of a rich glowing scarlet overlaid with orange; four to five feet high.

Henry A. Dreer—Flowers large, of a very rich crimson; foliage bronze-purple; entirely distinct. Four feet.

L. Guill—Flowers very large, of a beautiful rich salmon color; foliage green. Five feet.

Lutea Splendens—Large, dark green leaves; flowers large, on strong spikes; canary yellow, spotted light maroon. Four to five feet high.

Miss Sarah Hill—Showy, deep carmine flowers; large full spike; foliage green.

Maurice Rivoire—Large flowers, vermilion scarlet; foliage bronzy purple. Four feet.

M. Ferrand—Deep bronzy foliage; crimson scarlet flowers.

Paul Marquant—One of the most pleasing and beautiful on account of its large size and distinct and novel color. The flowers stand out from the spike in such a manner as to attract special attention. Color a beautiful shade of bright salmon with a carmine tint.

Star of '91—A grand variety for pot culture. It is a dwarf, compact grower, rarely exceeding two and one-half feet in height, and is a perpetual bloomer, summer and winter, if kept growing; flowers very large, in large compact panicles; colors rich, glowing orange-scarlet, faintly banded with golden yellow.

Souv. de Asa Gray—Dense metallic green foliage; fine, large, orange-crimson flowers.

Statuaire Fulconis—Rich, dazzling scarlet, shaded amaranth; foliage deep green. Four feet.

Tete d'Or—A vigorous grower, three and one-half to four feet high; foliage green; very free flowering; flowers large and showy; golden yellow, distinctly spotted with carmine.

Victor Hugo—Dark, bronzy green foliage; flowers large, bright, dazzling scarlet. Three to four feet.

CALADIUMS

One of the most striking of the ornamental foliage plants, either for pot or lawn planting. It will grow in any good garden soil; it is easy of culture, a full-sized plant being four or five feet in height, with immense leaves frequently three feet long. The roots should be preserved in dry sand in the cellar during winter.

DAHLIAS

The Dahlia is one of the most showy of our autumn flowers. Commencing to flower in August, they are a perfect blaze of bloom until stopped by frost in late autumn. The Cactus, Single and Pompon varieties are especially fine for cut flowers. We know of nothing more showy for table decoration than a loosely arranged bunch of long-stemmed Cactus or Single Dahlias. They delight in a deep rich soil, should be planted three and one-half to four feet apart and be tied to heavy stakes to prevent strong winds from breaking them down. The roots should be dug up in the fall and hung up in a dry cellar during winter.

GLADIOLI

The Gladiolus is the most beautiful of the summer or tender bulbs, with tall spikes of flowers, some two or more feet in height, often several from the same bulb. The flowers are of almost every desirable color, brilliant scarlet crimson, creamy white, striped, blotched and spotted in the most curious manner. As cut flowers they are the most lasting of anything we know. By cutting the spikes when two or three of the lower flowers are open, the entire spike will open in the most beautiful manner. Set the bulbs from six to nine inches apart and about four inches deep. Plant from middle of April to first of June. It is a good way to plant at two or three different times, ten days or two weeks apart. This will give a succession of bloom from July to November. In the fall, before hard frost, take up the bulbs, remove the tops, leave to dry in the air for a few days, and store in some cool place, secure from the frost, until spring.

TUBEROSES

One of the most beautiful summer flowering plants, producing spikes from two to three feet high, of double, pure waxy white flowers, delightfully fragrant. May be kept in bloom for a long time by planting from the first of April to the first of June. Very desirable for bouquets or baskets.

Hardy Bulbs for Fall Planting

We give herewith a list of the choicest flowering Bulbs. All the kinds mentioned under this head are intended only for fall planting. Plant the bulbs three to four inches deep in a rich loamy or light soil. Cover the beds with leaves during winter six inches thick and remove early in spring.

CHIONODOXA

Luciliae—Glory of the Snow. One of the very best hardy spring-flowering bulbous plants, producing spikes of lovely azure-blue flowers, with pure white centers. It is perfectly hardy, and may be planted as edging to beds, or in clumps and masses.

CROCUS

Naturalized in the grass, or planted thickly in irregular lines, as a border for taller-growing bulbs, or grown in any way whatever, the Crocus is always a cheery and charming little flower. It

opens among the first flowers of early spring, while the snow yet lies white on north hillsides, in a cold, dull time, when its bright colors are much appreciated. We have them in **Blue, White, Striped and Yellow.**

GALANTHUS (Snowdrop)

Nivalis—This, the earliest of spring-flowering bulbs, is universally admired for its elegant snow-white drooping blossoms. Plant thickly in groups in some sheltered spot, and the flowers will surprise you before the snow is all gone.

HYACINTHS

This deservedly popular bulbous plant is without doubt the most beautiful and useful of all spring-blooming bulbs; its delightful fragrance and the numerous tints of its beautiful trusses of bell-shaped flowers render it invaluable to all lovers of flowers, and afford pleasure and delight to millions of the human race. It is of the easiest culture, and with any reasonable care no one can fail to meet with success in its cultivation. It is, however, highly important to secure the bulbs and have them planted in the fall.

Pot Culture—A four-inch pot is the best size for the successful growth of the bulb. It delights in light, rich, sandy soil; when placed in the pot the upper surface of the bulb should be above the soil. After potting, water thoroughly and place them in a dark, cool place in the cellar or out of doors, well covered with sand or other like material, there to remain until well rooted, when they should be taken in a few at a time, to keep up a succession of bloom, and set in a warm and light place in the house or greenhouse to bring them into flower. When in active growth they should have an abundance of water. Support the flower stems with light stakes, if necessary, to keep them erect.

Glass Culture—Hyacinths are very pretty and very interesting when grown in glasses. Their management thus is simple and as follows: Fill the glass with clean rain water, so that the base of the bulb when set in the receptacle for it on top of the glass will just touch the water. Set away in a cool, dark place until well rooted. A succession may be kept up in the manner recommended for pot culture. Change the water frequently, washing out the roots, if necessary, to cleanse them of any foreign substance. A piece of charcoal in the glass will serve to keep the water sweet, and also affords nourishment to the plants.

Outdoor Culture—Plant in October or early in November, in soil deeply cultivated and rich. Set the bulbs about six inches apart and four inches deep, and when convenient place a handful of sand around each to prevent rot. Cover the surface of the bed with light, short manure, as a protection to the bulbs during the severe months of winter. Remove this covering as soon as the severe frost is gone in spring. After flowering, and when the foliage is well matured, the bulbs may be removed from the soil and kept dry until the following fall; or, if the bed is wanted for summer flowering plants before the foliage is ripened, the bulbs may be carefully removed and again covered with soil in any out-of-the-way corner of the garden until they have matured their foliage. Some cultivators allow their bulbs to remain in the beds several years undisturbed, and with excellent results.

LILIES

No class of plants capable of being cultivated out of doors possesses so many charms; rich and varied in color, stately and handsome in habit, profuse in variety, and of delicious fragrance. They thrive best in a dry, rich soil, where water will not stand in winter. After planting they require very little care, and should not be disturbed for several years, as established plants bloom more freely than if taken up annually.

Harrisii (The Bermuda Easter Lily)—The flowers are large, trumpet shaped, pure waxy white, gracefully formed and delightfully fragrant. The ease with which it can be forced into flower in winter has made it wonderfully popular as a winter flower. Tens of thousands of it are grown every year for church decorations at Easter.

Pavdalinum—Scarlet, shading to rich yellow, spotted with purple brown.

Speciosum Rubrum—White, beautifully spotted red; flowers in August. This is one of the most useful sections of the lily family, perfectly hardy, and flowering well under all circumstances.

Tigrinum fl. pl. (Double Tiger Lily)—Bright orange scarlet with dark spots; fine.

Wallacei—Beautiful clear buff color, spotted black.

NARCISSUS

Admirably adapted for garden decoration in early spring. They are easily cultivated; hardy. Very showy and fragrant. Should be planted in the fall, same as tulips. Fine for winter culture in pots or boxes.

There are several quite distinct classes of Narcissus; the old yellow Daffodil, or Trumpet Narcissus, the white-flowered Pheasant's Eye or Poet's Narcissus, and the Polyanthus Narcissus. The first two are among the hardiest and most desirable plants of the garden, and give more satisfaction with less care than almost any other plant.

When once established they do not need to be reset for several years, and will thrive in almost any soil. They are not only desirable for the garden, but equally so for the house. One to four bulbs set in a five-inch pot will bloom even in the smoky atmosphere of the city, where their beautiful color and delicate fragrance are doubly welcome.

The Polyanthus varieties need some protection through winter in the North, but will do finely without it in the South. They are exceedingly valuable for flowering in pots in the house. The Paper White Grandiflora and the Double Roman may be made to come into bloom in December, and this, with other varieties of Narcissus, will give a continuous succession of profuse bloom until spring. They thrive best in a cool temperature.

JONQUILS

A species of Narcissus, native of Spain, easily grown in house or garden, and always a favorite for its bright yellow, deliciously fragrant flowers, which are abundantly produced on stems about a foot long, each bearing a cluster of florets. They are very popular as cut-flowers, and can be successfully grown by everyone. Well suited for

window plants, as the flowers seldom fail to expand and continue a long time in perfection. Culture same as given for Narcissus.

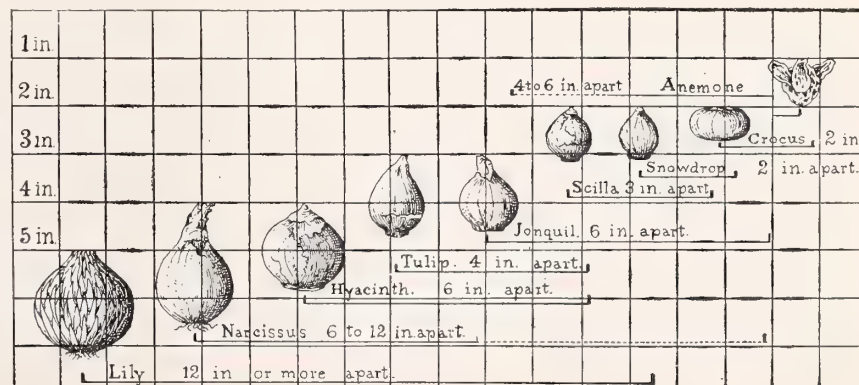
TULIPS

Ready for delivery in September

It is difficult to conceive of anything more brilliant in color than a bed of good tulips. Their great variety of color, intense brilliancy and beautiful shading make them universal favorites. Another consideration in their favor is the ease with which they can be cultivated, only requiring good common garden soil to grow them to perfection. There are no bulbs which make such a rich and gorgeous display of blossom with so little care and cultivation.

The Dutch growers have so mastered the art of tulip culture that they are now able to offer bulbs at prices which bring them within the reach of all, and of a quality which leaves nothing more to be desired. The tulips we offer are

Bulbs indoors do not require such deep planting as indicated in the diagram, there being no danger from frost to guard against. Cultural directions for bulbs in the house are given in the preceding pages in connection with the various varieties. The Hyacinths, especially, make very good subjects for indoor pot culture.



A Good-bye Word to the Reader

The recitation is over. Together we have read a few pages of "Nature's infinite book of Secrecy" and, I trust, we have learned to syllabicate and articulate some of her motherly croon. I have taken you with me in a conversational trip around the world, and endeavored to enforce the lesson of beautiful yards by the presentation of many pictures showing the best style of garden com-

positions. My efforts were intended to increase your appreciation of the natural beauty in trees and shrubs and flowers, but I frankly own that my love for them has been increased in the telling. And after all that has been said of the beauty of flowers, I want to write it down as the last sentence in this book that the fairest are those that grow within our hearts. The class is dismissed.

Index to Descriptive Text

	Page No.		Page No.
Annual Flowers.....	45	Munich, Germany.....	122
Ants in Lawns.....	23	Municipal Work.....	15
Arborgola.....	14	Nasturtiums.....	46
Author's Own Garden.....	7	Natural Gardens.....	16
Bailey, Prof.....	95	New Orleans, Scenes in.....	74
Basic Principles.....	16	New Way, The.....	113
Bower Bird.....	96	Old-fashioned Gardens.....	31
Bulbs.....	34, 35	Old Way, The.....	13
Burbank, Luther.....	113	Our System.....	13
Car Barns, Ypsilanti, Mich.....	53	Outdoor Parlor.....	33
Cemeteries, Article on.....	25	Owen Stanley Range.....	96
Cemeteries, Evergreens for.....	26	Pansies.....	46
Cemeteries, Varieties for.....	25	Park Donations.....	46
Clinton Hotel and Sanitarium.....	130	Parkway Planting.....	47
College Grounds.....	38	Parlor, Outdoor.....	33
Color Chart.....	56	Parterre.....	106, 107
Conifers, Lecture on.....	43	Pasadena, Calif.....	121, 128
Corporation Work.....	15	Perennial Flowers.....	31
Country Homes.....	40	Pergola in Cemetery.....	25
Custer Monument.....	6	Pictorial Section.....	59
Ellipse, The.....	57	Pictorial System.....	20
Esplanade.....	114	Postgraduate Study.....	42
Exposition Grounds.....	39, 81	President Taft.....	6
Evergreens for Cemeteries.....	26, 94	Privet Arch.....	60
European Playgrounds.....	48	Public Playgrounds.....	47
Fact to Remember, A.....	128	Railroad Landscape Gardening.....	53
Factory Grounds.....	37	Rag-time Gardens.....	56
Family Fruit Garden.....	85, 131	Reforestation.....	49
Forests, Conservation of.....	49	Roadways, Building of.....	52
Forests, Artificial.....	50	Roof Garden, Tuller Hotel.....	54
Forestry, Course in.....	51	Rose Arbor.....	28
Formal Gardens.....	16	Roses, Article on.....	28
Formulas for Insects.....	132	Roses, Mulching Beds.....	30
Golden Gate Park.....	124	Roses, Pruning of.....	30
Grandmother's Garden.....	31	Roses, Varieties of.....	28
Greening Lectures.....	43, 44	School Grounds.....	38
Greening System of Pruning.....	133	Scientific Institute.....	37
Hamburg, Germany.....	101	Scott, Sir Walter.....	84
Hansen, Prof.....	116	Screens.....	33
Hardy Trees and Shrubs.....	24	Seed for Lawns.....	23
Hedges.....	19, 32	Shakespeare.....	90
Herculeine Tree Machine.....	39	Shrubs for Cemeteries.....	25
Hive, The Spirit of.....	55	Shrubs for Shady Places.....	27
Holy Cross Cemetery.....	136	Shrubs, Hardy Varieties.....	24
Horticultural Adviser.....	19	Soil Renovation, Lecture on.....	44
House of David.....	129	Spanish Patio.....	109
I Invite.....	139	Spirit of the Hive.....	55
Insects, Formulas for.....	132	Spraying, Lecture on.....	44
Italian Garden.....	88	State Fair Exhibit.....	39
Japanese Garden.....	124	St. Mary's College.....	12
Japan Maples.....	97	Sunken Garden.....	14, 88
Lake Poets.....	69	Sweet Peas.....	45
Landscape Plans.....	127	Tree Propagation, Lecture on.....	43
Landscape Gardening School.....	42, 110	Tree Surgery.....	126
Lawn Making.....	21	Trinity of Service.....	13
Lectures at Greening Nursery.....	43, 44	Tubers, Spring.....	35
Longfellow.....	102	Tulips in Beds.....	34, 35
Longpré, Paul de.....	128	Typical Effects.....	58
Lotus Beds.....	87, 109	Vines on House.....	24, 38
Lure, The.....	102	Walks and Drives.....	17
Macadam Roadways.....	52	Water—universal manure.....	36
Memory Garden.....	104	Water Gardens.....	40
Model Country Home.....	131, 138	Watering Lawns.....	22
Money by Subscription.....	47	Windbreaks.....	32
Monroe Marshes.....	87, 109	Wilton, Leonard.....	85
Mt. Vernon.....	75	Woodlots, Planting of.....	51

Index to Illustrations

	Plate No.		Plate No.
Alpine Plants.....	100	Informal Garden.....	53, 56
Arborgola.....	3	Italian Garden.....	107, 132, 137
Artistic Garden View.....	154, 104	Japanese Garden.....	37, 179
Artistic Driveway.....	114	Japan Maples.....	125
Ash Trees for Street.....	103	Landscape Plans.....	185-189
Author's Country Home.....	153	Lawn Scene.....	139, 160, 171
Auto House.....	163	Lovers' Lane.....	18
Backgrounds.....	77	Memory Garden.....	140
Back Yards.....	59, 67, 76, 144, 169	Midsummer Scene.....	8
Beautiful Parterre.....	143	Model Country Home.....	188
Beautiful Vista.....	131	Narcissi in Woods.....	19, 41
Boston Ivy on Wall.....	28	Narcissi Naturalized.....	41
Bower Bird.....	124	Natural Pond.....	108
Bower of Rustic Beauty.....	17	Natural Theater.....	88
Catalpa Bungei.....	67, 115, 149	Neglected Approach.....	70
Cemeteries, Pergola in.....	13	Novel Idea.....	176
Cemetery Entrance.....	120, 134	Old-Fashioned Garden.....	101, 147
“ Evergreens for.....	15, 175	Open Lawn Treatment.....	11
Cemetery, New Orleans.....	79	Ornamental Grasses.....	165
Colonial Garden.....	63, 81	Ornamental Terrace.....	164
Color Chart.....	45	Pæonies.....	170
Completed Landscape.....	7	Park Scene.....	5, 21, 24, 78, 80
Country Home.....	127	Park Subdivision.....	122
Cozy-Corner.....	68	Parkway Planting.....	36, 89, 103, 177
Design for Pergola.....	180	Paul de Longpré, Residence of.....	184
Deutzia Border.....	106, 142	Pergola.....	59, 60, 97, 102, 123, 178, 180
Disappearing Walk.....	82	Pergola in Cemetery.....	13
Doctoring Trees.....	181, 182	Pergola Overlooking Garden.....	29
Double Reverse Curve.....	57	Picturesque Scene.....	4, 100
Dutch Garden.....	174	Pomono Lane.....	20
Egyptian Gardens.....	64	President Taft.....	85, 158
Ellipse, The.....	46, 47, 48, 49	Privet Arch, Hedges, etc.....	51, 97, 200
Englishman's Home.....	30	Pruning Silver Maple.....	190
Entrance to Woods.....	58	Railroad Grounds.....	25, 42
Entrance Gate.....	173	Rear Approach.....	129
Entrance to Cemetery.....	120, 134	Residence Street.....	52
Esplanade.....	159	Residential Grounds.....	113
Evergreens.....	86, 90, 109, 175	Residential Hotel.....	110
Exposition Grounds.....	28, 93	Right Way of Planting.....	112
Family Fruit Garden.....	102, 189	Rippling Brook.....	130
Flower-Covered Terrace.....	138	Roof Garden.....	43
Flowery Glen.....	50	Rose Garden.....	145
Forest, Artificial.....	39	Rustic Arbor.....	72
Forestry Nursery.....	38	Rustic Summer House.....	116
Fork in the Road.....	146	Scene in Rolling Country.....	83
Formal Garden.....	94, 148, 149, 168, 172	Screens.....	91, 117
Fraternity House.....	151	Shasta Daisy.....	113
Front Yard.....	84	Shrubs for Narrow Space.....	54
Garden Entrance.....	40	Shutting off Unsightly View.....	75
Gentleman's Estate.....	65	Side Entrance to Mansion.....	11, 95, 99
Grape-Arbor.....	71, 178	Somewhere to Somewhere.....	162
Grass Walk.....	128	Street-Curb Gardening.....	36, 89, 177
Greening Avenue.....	98	Strong Contrasts.....	135
Greening Exhibit.....	28	Surveying.....	183
Greening Lectures.....	32, 33, 34, 35	Sunken Garden.....	2, 141
Greening's Horticultural Garden.....	53	Sylvan Retreat.....	15
Greening Method of Summer Pruning.....	190-198	The Three are One.....	1
Greening Park.....	21, 167, 168	The Lure.....	136
Hardy Garden.....	92	Tree Surgery.....	181, 182
Hedge, Arbor Vitæ.....	74	Tulip Beds.....	22, 23
Herculeine Tree Machine.....	39	Vegetable Garden.....	161
Hive, The.....	31, 44	Vine-Embowed House.....	72
Hydrangea.....	119, 121	Vines on Wall.....	25, 38, 62
Improved Farm House.....	199	Water Scene.....	69, 105, 150
		Wrong Way of Planting.....	111

Index to Botanical Names

- Abies 145
 Acanthus 159
 Acer 140
 Achillea 159
 Aesculus 140
 Ailantus 140
 Akebia 153
 Alnus 140
 Amorpha 148
 Ampelopsis 153
 Amygdalis 148
 Anemone 159
 Aquilegia 159
 Aralia 141
 Arbor Vitæ 146
 Aristolochia 153
 Aster, hardy 159
 Astilbe 159

 Berberis 148
 Betula 141, 145
 Bocconia 159
 Buxus 147

 Caladium 161
 Calicanthus 149
 Campanula 159
 Canna 161
 Caragana 149
 Catalpa 141
 Cedrus 145
 Celastrus 153
 Celtis 141
 Cerasis 141, 144
 Cercis 141
 Chionanthus 149
 Chionodoxa 162
 Chrysanthemum 159
 Clematis 154
 Clethra 149
 Colutea 149
 Cornus 141, 149
 Corylus 149
 Crataegus 141
 Crocus 162
 Cupressus 145
 Cydonia 149
 Cytisus 141

 Dahlia 161
 Daphne 147
 Diervilla 150
 Delphinium 159
 Desmodium 149
 Deutzia 149
 Dianthus 160
 Dicentra 160

 Digitalis 160
 Dioscorea 154

 Elæagnus 150
 Euonymus 147
 Eulalia 160
 Exochorda 150

 Fagus 141, 144
 Forsythia 150
 Fraxinus 141
 Funkia 160

 Gaillardia 160
 Galanthus 162
 Gladioli 162
 Gleditschia 141
 Gymnocladus 141

 Halesia 142
 Hamamelis 150
 Hedera 153
 Hibiscus 150
 Hollyhock 160
 Hyacinths 162
 Hydrangea 150
 Hypericum 151

 Iris 160

 Jonquils 163
 Juniperus 146

 Kerria 149
 Kolreuteria 142

 Larix 142
 Ligustrum 151
 Lilies 162
 Lindera 151
 Liquidambar 142
 Liriodendron 142
 Lonicera 151, 154
 Lychnis 160
 Lycium 154

 Magnolia 142
 Mahonia 147
 Morus 144

 Narcissus 163
 Negundo 140

 Pæonia 160
 Perennials 159

 Philadelphus 151
 Phlox 160
 Picea 146
 Pinus 146
 Plantanus 142
 Platycodon 160
 Populus 143
 Prunus 143, 151
 Pyrethrum 160
 Pyrus 143, 145, 151

 Quercus 143

 Ramanas Roses 151
 Retinospira 146
 Rhamnus 151
 Rhododendron 147
 Rhodotypus 151
 Rhus 152
 Ribes 152
 Robinia 152
 Rosea 155
 Rudbeckia 160

 Salisburia 143
 Salix 144, 145
 Salvia 160
 Sambucus 152
 Sassafras 144
 Sophora 144
 Sorbus 143
 Spiræa 155, 160
 Stokesia 160
 Symphoricarpos 152
 Syringa 153

 Tamarix 153
 Tecoma 154
 Thuya 146
 Tilia 144
 Tsuga 147
 Trillium 160
 Tritoma 160
 Tuberoze 162
 Tulips 163

 Ulmus 144, 145

 Viburnum 153

 Wistaria 154

 Yucca 160

Index to Common Names

- Acacia Locust 152
 Adam's Needle 160
 Akebia 153
 Alder 140
 Althea 150
 Angelica Tree 141
 Annuals 45
 Arbor Vitæ 146
 Ash 141, 143, 145
 Astilbe 159
 Asters 46

 Barberry 148
 Basswood 144
 Bear's Breech 159
 Beech 141, 144
 Bell-flower 160
 Bignonia 153
 Birch 141, 145
 Bird Cherry 143
 Bittersweet 153
 Bladder Senna 149
 Blanket Flower 160
 Bleeding Heart 160
 Boston Ivy 153
 Box Elder 140
 Boxwood 147
 Bridal Wreath 152
 Buckthorn 151
 Buttonwood 142

 Caladium 161
 Canna 161
 Care of Stock 148
 Carolina Allspice 149
 Catalpa 141
 Cedar 145, 146
 Celestial Tree 140
 Chrysanthemum 159
 Cinnamon Vine 154
 Clematis 154
 Columbines 159
 Corchorus 149
 Crocus 162
 Cucumber Tree 142
 Cypress 145, 146

 Dahlia 161
 Desmodium 149
 Deutzia 149
 Dogwood 141, 149
 Dutchman's Pipe 153

 Eglantine 151
 Elder 152
 Elm 141, 145
 English Ivy 153
 Evergreens 26, 145

 False Indigo 148
 Filbert 149

 Fir 145
 Flowering Almond 152
 " Cherry 141, 144
 " Crab 143
 " Currant 152
 " Thorn 141
 Foxglove 160
 Fringe Tree 149

 Garland Flower 147
 Giant Daisy 160
 Ginkgo 143
 Gladioli 162
 Golden Bell 150
 Golden Glow 160
 Grasses, Hardy 160

 Hackberry 141
 Harebell 159
 Hardy Sage 160
 Hazel 149
 Hemlock Spruce 147
 Honey Locust 141
 Honeysuckle 151, 154
 Horse Chestnut 140
 Hyacinths 162
 Hydrangea 150

 Indian Currant 153
 Iris 160
 Ivy 153

 Japan Quince 149
 Jonquils 163
 Judas Tree 141

 Kentucky Coffee Tree 141

 Laburnum 141
 Larch 142
 Larkspur 159
 Lilies 162
 Lilac 153
 Linden 144
 Locust 141

 Magnolia 142
 Mahonia 147
 Maidenhair Tree 143
 Matrimony Vine 154
 Maltese Cross 160
 Maple 140
 Michalmas Daisies 159
 Mock Orange 151
 Mountain Ash 143, 145
 Mulberry 33, 144

 Narcissus 31, 52, 163
 Nasturtiums 46

 Oak 143
 Oleaster 150
 Pæonia 160

 Pagoda Tree 144
 Pansies 46
 Pea Shrub 149
 Pearl Bush 150
 Phlox 160
 Pine 146
 Plane Tree 142
 Planting Shrubs 148
 Plum, Purple 143
 Plume Poppy 159
 Poplar 143
 Privet 151
 Pruning Shrubs 148
 Purple Fringe 152

 Red Bud 141
 Red-hot Poker 160
 Rhododendron 147
 Rhodotypus 151
 Rosa Rugosa 151
 Roses 155
 Rose of Sharon 150

 Sassafras 144
 Silver Bell 142
 Spiræa 152
 Smoke Tree 152
 Snowball 153
 Snowberry 152
 Snowdrop 162
 Spice Bush 151
 Spruce 146
 Strawberry Tree 150
 St. John's Wort 151
 Stokes' Aster 160
 Sumac 152
 Sweetbrier 151
 Sweet Gum 142
 Sweet William 160
 Sweet Pepper Bush 149
 Sweet Peas 45
 Sycamore 142
 Syringa 151

 Tamarisk 153
 The Pearl 159
 Tree of Heaven 140
 Tuberoses 162
 Tulip Tree 142
 Tulips 34, 35, 163

 Umbrella Tree 142
 Varnish Tree 142
 Virginia Creeper 153
 Weigelia 150
 Willow 144, 145
 Windflower 159
 Wistaria 154
 Witch Hazel 150
 Wood Lily 160
 Yucca 160

L'envoi

The writing of this book has been a labor of love. I send it forth on its mission with the high hope that it will give some measure of pleasure to all my readers—to you who read these lines. Its object is to make you acquainted with the out-of-doors. It longs to make you see new beauties in the common things of the garden's care, the cheery offspring begotten of the earth and air. It seeks to drive from out your mind the worry of your daily strife and woo you with a lover's zeal to the glories of the "simple life." It tries to win you back to Eden once again.

My Contributors

My thanks are due, first of all, to Mr. Arzena Ferdine Langlois, whose genial spirit was never banished from the Eden of his youth, and who for more than twenty years has been my steadfast friend. His love of flowers and devotion to his art have kept alive and beautiful within his soul a garden where the serpent of deception does not crawl and the apples of ashes do not grow. In the toilsome days of preparation, when my brain grew weary and my pen was numb, his practical garden experience and the felicity of phrase, characteristic of his race, were to me a cheer and a support.

I am also indebted to Doubleday, Page & Company, publishers of Country Life in America and The Garden Magazine, for the use of many garden views; also to Mr. N. R. Graves for a number of such views; to Mr. Paul de Longpre, the world's greatest painter of flower forms, for a view of his grounds in California; to Mr. F. W. Brooks, vice-president of the Detroit United Railway, for a view of the Ypsilanti power-house; to Mr. L. W. Tuller, Detroit, Mich., for a view of his hotel cafe; to the Sisters of St. Mary's College for a number of views from their grounds; to D. M. Ferry & Co., for the loan of a cut; and to the Grand Trunk Literary and Scientific Institute, Battle Creek, Mich., for the cut illustrating the article on Factory Grounds.

And lastly, I want to thank The Blade Printing and Paper Co., Toledo, Ohio, for the excellent typography and artistic mechanical make-up of this book. I confidently believe that in all the range of horticultural literature there is nothing to surpass it in excellence of workmanship and beauty of finish.

NOV 22 1946



APR 9 1947

